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THE MINING CONGRESS JOURNAL

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In This Issue:

General Sales Tax Inevitable
By SENATOR REED SMOOT

Disadvantages of Sales Tax
By H. B. FERNALD

Wilson Urges Congress to Quit
Juggling and Reduce Taxes

Madame Curie Forgets to Press
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Western Governors Urge World's
Greatest Reclamation Program

Gold Industry's Fate Rests
With Secretary Mellon

Opportunity in Foreign
Petroleum Fields

Leasing Regulations Changed

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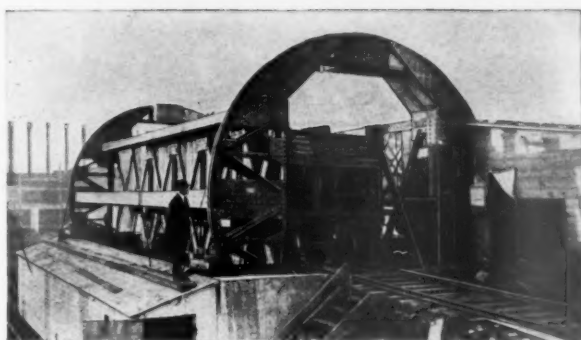
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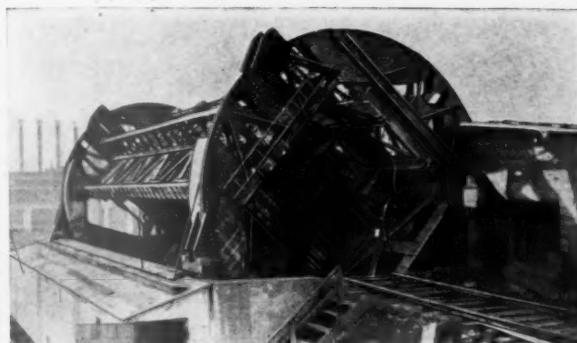
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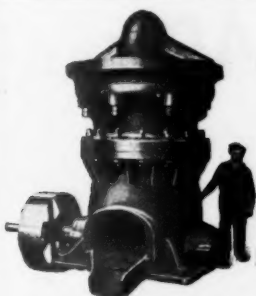
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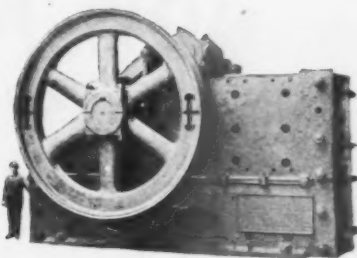
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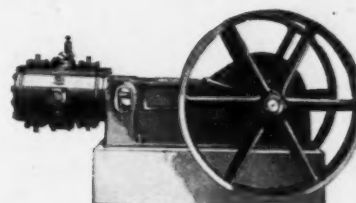
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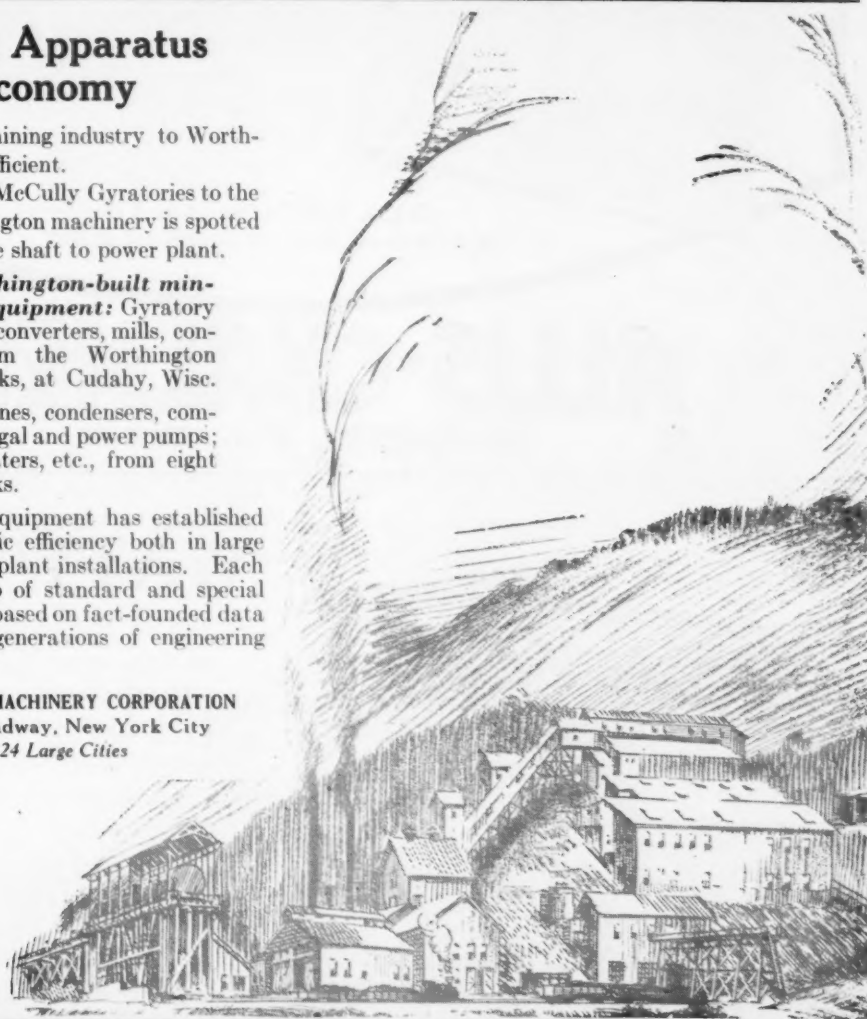
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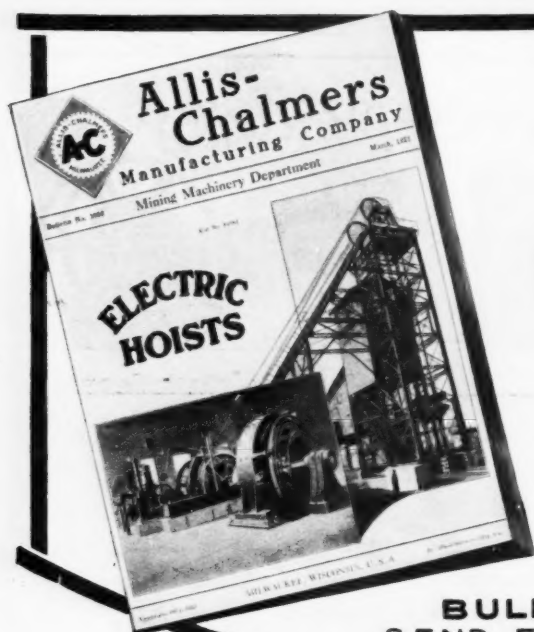
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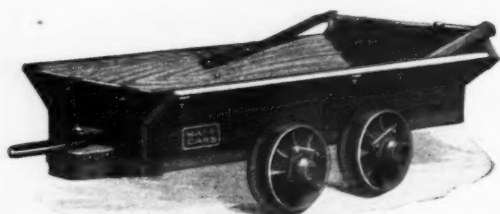
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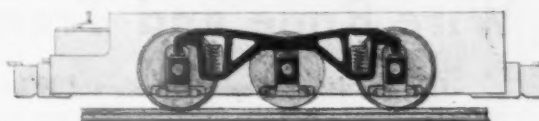


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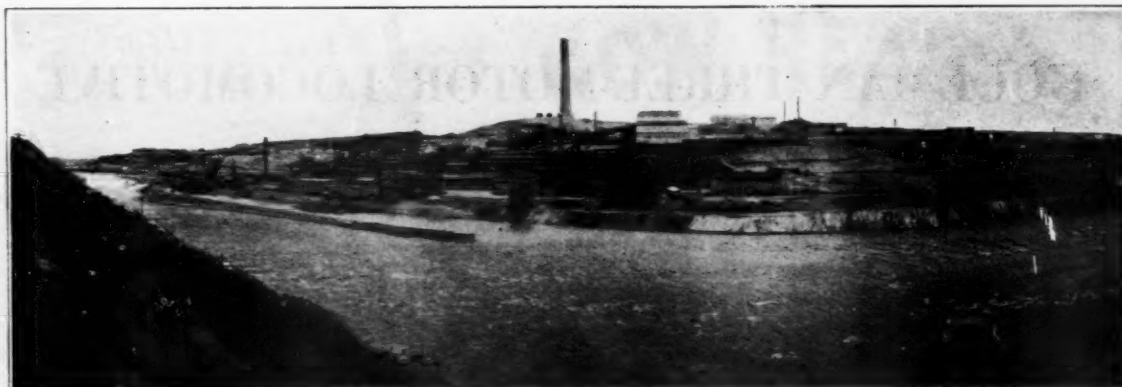
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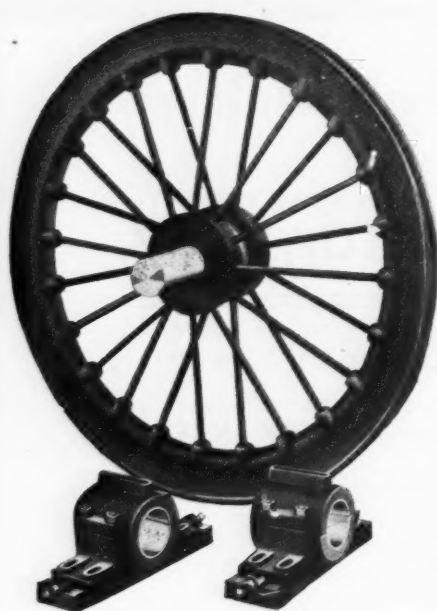
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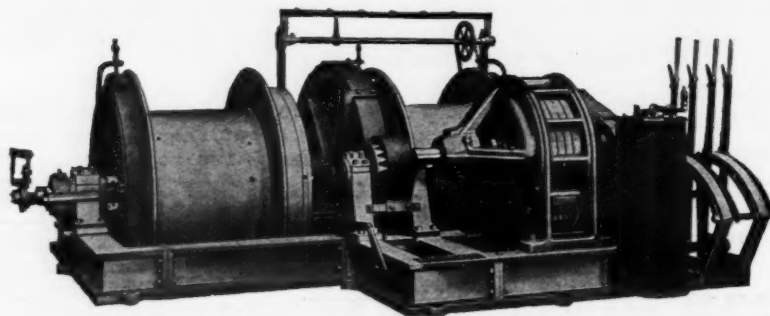
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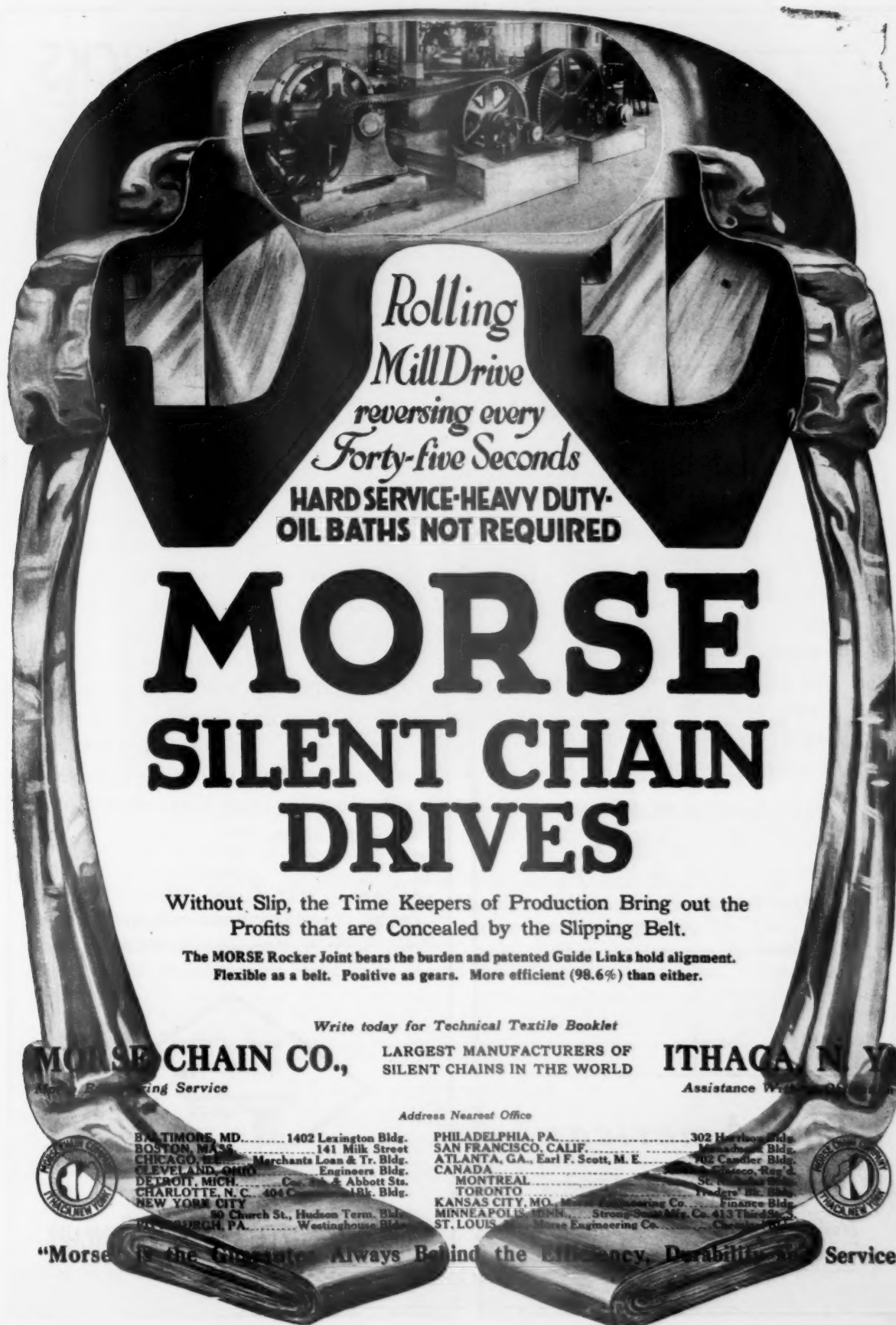


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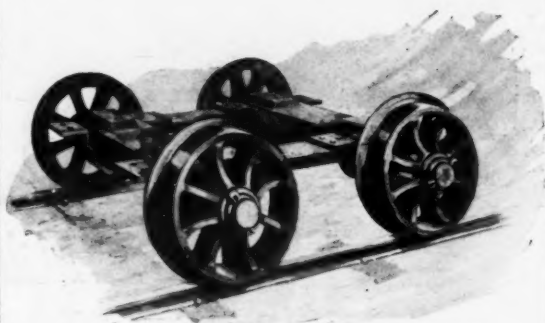
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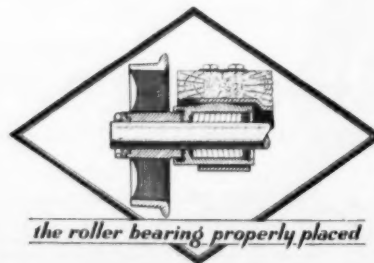
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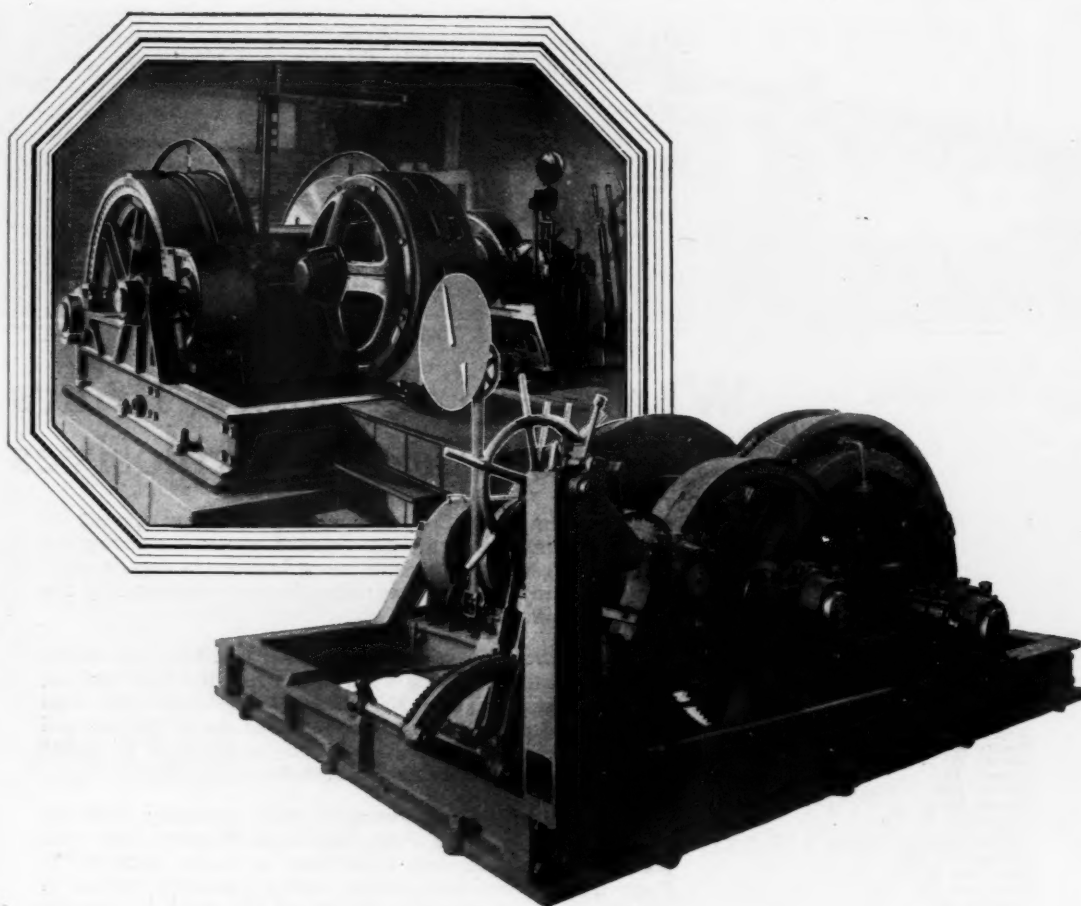
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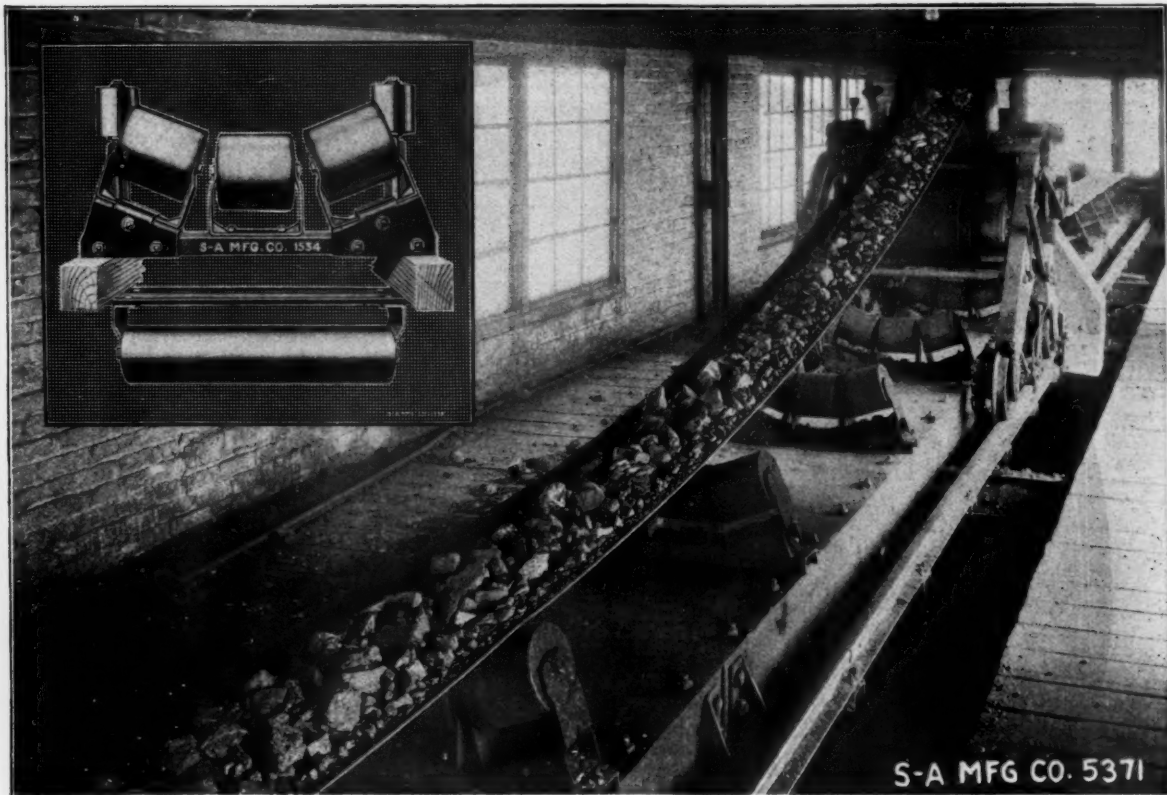
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FOREIGN TRADE AND DOMESTIC INDUSTRY

DECREASING EXPORTS and increasing imports add to the problems of keeping the national industrial machinery in complete operation. Altogether the larger part of American production is consumed by the American people. Only a small percentage of the total output is ever shipped to foreign countries. An investigation made by the writer a few years ago, indicated that business conditions in this country are usually considered unsatisfactory when we are shipping but 5 percent of our total production to foreign markets; when we are shipping $7\frac{1}{2}$ percent of total production to foreign markets business is fairly good; when we are shipping 10 percent to foreign markets business is brisk, all productive machinery is in operation and every man desiring work is employed at good wages. It is the business of statesmanship to make it possible for this condition always to exist.

Why are exports decreasing and imports increasing in all commodities and why are imports of gold continually piling up a gold supply which is needed by foreign nations to maintain their credit and to furnish to them the machinery of industrial life?

We are advised to save and work, and yet even the carrying out of this advice creates or is likely to create unsatisfactory conditions. We may be saving too much; so much as to shut off the demand which must continue if all desiring work are to be employed.

Before the war this country owed to European countries about three quarters of a billion dollars, now European countries owe us in excess of ten billion dollars. Before the war we had in this country approximately one-fifth of the world's total gold supply, now we have approximately one-third of the world's gold. The world needs our production more than ever before but lacks the credit with which to purchase.

What is the remedy?

A most comprehensive remedy was proposed by Secretary of Commerce Herbert Hoover in an address before the United States Chamber of Commerce at Atlantic City, last month. The suggestion is as follows: "It is economically feasible to continue a large favorable balance of trade, provided we are prepared to reinvest our balance in long time credit in the creation of reproductive enterprises abroad."

This suggestion acted upon in a broad, comprehensive way by the American people will solve the problem while it will continually add to the wealth of this country. We are not without successful precedents upon which to base this conclusion. The General Electric Company has furnished perhaps the most notable example of the advantages of this method.

Notwithstanding the present business depression, the United States is the great wealthy nation of the world.

It has a wealth of credit and a prepondering supply of gold which is the basis of credit in foreign business transactions. It may either develop business activities in foreign countries through foreign corporations organized for that purpose, or it may purchase the securities of foreign business enterprises already in operation and thus furnish the capital through which purchasers of our exports may be financed. The latter plan would give to this country reasonable security for the investment with interest thereon. The former plan would make more certain the safety of the investment, would be equally certain to pay the interest charge upon the capital and also insure the larger profits which every well conducted business enterprise usually creates, as well as to furnish a certain market for American machinery and supplies which could not otherwise be assured. The War Finance Corporation is one of the agencies through which much assistance can be given to such enterprises. The proposed hundred million dollars finance corporation under the provisions of the Edge law now in process of organization offers additional assurance that plans of this kind through its assistance might be carried out.

We are not without precedent for the success of national movements of this character. The wonderful industrial growth and the comprehensive foreign influence of Germany at the beginning of the war is sufficient proof of the advantage of investment in foreign business enterprises and this is more particularly true as it relates to the present industrial condition of the United States. An outlet for our surplus productive capacity is the crying need of the business hour. Let us emphasize Secretary Hoover's proposal of the means by which this condition may be made to prevail: "*It is economically feasible to continue a large favorable balance of trade, provided we are prepared to reinvest our balance in long time credit in the creation of reproductive enterprises abroad.*"

OUR FOREIGN DIVISION

ONE OF THE PURPOSES for which the Foreign Division of the American Mining Congress has been created is to lend assistance in the process of "the creation of reproductive enterprises abroad."

To the extent that this work is successful it will make employment for American engineers, American business managers, and create an exceptional market for American machinery and supplies and it will give to the American people the control of business enterprises which will largely assist in the maintenance of a favorable trade balance. At the same time it will be able to keep American mining men fully posted as to the developments in foreign countries, the possible market for mineral products abroad and the extent to which foreign competition may interfere with home production.

THE OPEN SHOP

CONTINUED REITERATION of the statement that advocates of the open shop do not mean an open shop but a shop closed against organized labor will in time, if not denied, create in the public mind a suspicion that such a thing as a real open shop is an impossibility.

As a matter of fact such a conclusion is entirely without foundation. Open shops do exist, have existed and always will exist in many lines of industry. Real open shops, in which no applicant for a position is asked whether he is or is not a member of a labor union; shops in which members of a union may work side by side with non-members without any discrimination either against each other or by the employers against either.

The open shop system has nothing to do with hours of service, wages paid, or the conditions surrounding employment. It does not prevent any man from leaving his employment at will. It does not prevent the employer from terminating the service of those who are either inefficient, careless or insubordinate. It gives ample opportunity for the creation of such discipline and the exercise of such management as are essential to efficient production.

The American people, those who have nothing to do with industry and those who are directly connected with industry; employers and employees alike, are all consumers. It is therefore fair in the discussion of a public question which affects every citizen of the country that the interests of the great majority shall receive first consideration.

Efficiency means larger and therefore cheaper production. Large and cheap production means an overstocked market and lower prices which in turn means increased consumption. Continuous employment for all workers with proper equipment and intelligent direction means an ample supply of the necessities of life and an increasing amount of life's luxuries for all.

The closed shop means inefficiency, ineffective direction, and restricted production and a limitation of luxuries to the masses.

The demand of American people for the open shop will be intensified by every misstatement of the principle involved.

WHY PERSECUTE THE COAL INDUSTRY

CONGRESS is again considering bills for the special regulation of the coal industry. The public clamor for legislation is based upon an entire misapprehension of the intricate machinery which must function simultaneously and in consecutive order if coal is to be available at all times and in all places where needed.

Other lines of industry, equally important to the public welfare, are not legislated upon whenever these industries fail to furnish the proper supply. No one has seemed to believe that the fruit industry should be subject to special legislative requirements. In fact the fruit industry has been permitted in more or less direct violation of the requirements of the Sherman Anti-Trust Law to organize itself so as to more satisfactorily meet the public demand. Fruit growers associations control total output, allocate to the proper market, see to it that one city does not receive ten times the amount of fruit which it can possibly consume while another city is left without a proper supply. These associations estimate the amount of fruit which a business center can consume and as nearly as may be possible allocate to that point the required amount. Incidentally the average price of fruit to the retailer is less than when this business was handled in a haphazard manner, when dealers in the city with an over-supply were glad to dispose of surplus stocks at less than cost in order

to prevent the total loss of a perishable commodity while some other city at the same time might be entirely without the supply which its market demanded. It is true that in the over-supplied city fruit was sold cheaper, very much cheaper than it would have been had the supply been properly allocated. On the other hand it is true that the other city is not able to supply its needs at any price. If we grant that the average price of fruit is higher than was the cut-throat price in an overstocked market in the haphazard days, yet we insist that continuous supply of a necessity justifies a higher price than can be secured in an overstocked market and therefore that the California Fruit Growers Association has thus far fully justified its existence. Had the coal business been authorized to function in like manner, coal operators would have been in position to take a fair profit upon their operation, useless operations would have been discontinued, the mines could have operated more continuously and therefore more economically and every section of the country would have been supplied with coal at a fair price and at all times. Because the coal industry has not been allowed to co-operate in meeting the public demand it is being singled out for special repression and regulation. Because it has been made impossible for coal operators to co-operate in serving the public need, we find an intolerable condition existing which is being made more intolerable by repressive legislation, by public investigation and continuous harping of the public press.

During the war the enormous production required to satisfy military needs was made possible by enforced co-operation in open violation of every principle of the Sherman Anti-Trust Law. It would seem wise that we benefit by this experience, profit by the good, discard the bad and make conditions available through which not only in coal, but in every industry, there shall be the highest efficiency in production, transportation and distribution as well as the greatest conservation of natural resources which once wasted can never be replaced.

LOST—TWENTY THOUSAND YEARS

APPROXIMATELY four hundred thousand mine and metal workers were involved in strikes in the United States last year. The total number of days spent in idleness was in round numbers six million. Counting three hundred working days as a year, the strike loss of one branch of industry during 1921 amounted to twenty thousand years.

Nothing is so illustrative of utter waste as lost time. The mill cannot grind with water which has passed, but some other mill may, and the water as a matter of fact is still available for a thousand purposes. The proverbial spilt milk is not altogether a loss because it at least enriches the soil. Even neglected opportunity sometimes reappears in new guise. But time once lost is gone forever, like the continent of Atlantis, or Kaiser Bill's opportunity to prove himself a man of peace, or the fallen angels' chances for ever spending another summer at a cool resort.

In a period of high prices for the very necessities of life, the labor of twenty thousand men for an entire year can ill be spared. The economic loss to the nation would be considerable at any time, but it is especially great in an era of scarcity and inflated values. And those who caused the loss felt it most keenly. The sooner employers and employees realize that this is always the inevitable result of strikes and lockouts, the sooner will we arrive at the general establishment and acceptance of the open shop—the best friend honest labor and honest capital will ever have.

UNITED STATES GOLD CUSTODIAN OF WORLD

THE GOLD STOCK of the United States increased from a normal of one and three-fourths billion dollars in 1914 to about three billion dollars at the time that this country declared war in 1917. The gold stock then declined about half a billion dollars by excess exportation up to the spring of 1920, when the importation of gold began to exceed exportation. The gold stock May 1 of this year was slightly in excess of three billion dollars, indicating that these former losses had been balanced by the recent heavy influx of gold. The addition to our normal gold stock which took place between 1914 and 1917 was due to the exhaustion of credit and the need for shipping gold in payment for the necessities of war which our Allies were forced to obtain in this country. When this nation entered the war heavy shipments of gold to Europe were made to meet our own expenses, and during 1919 this loss of gold was augmented by sending two-thirds of our total gold exports to the Orient in liquidation of adverse trade balances created largely by the extensive demands of our own people for luxuries, such as silk.

The heavy influx which has recently taken place is due largely to the negligence of this country as a creditor nation to extend the volume of credit necessary for the industrial reconstruction of Europe. It is also evidence that much of the credit extended through private channels was not properly allocated to the industrial requirements of Europe. Many opinions have been expressed with reference to the effect that this influx of gold will have in this country, as to whether it will be beneficial or not. The United States has become the custodian for the billion and a quarter dollars of gold which it now holds in excess of its normal gold reserve of 1914, and as a custodian for this gold it should not be allowed to become the basis for domestic credit and currency expansion. It is evident that if this gold were to become the basis of a credit expansion, it could not be readily released for export, and if the need arose for its exportation, it would force a too rapid contraction in the credit and currency structure of the country.

On May 14, 1920, the gold cover of the Federal Reserve note was 46.6 percent, from which may be computed that there was about two hundred million dollars in the reserve of the Federal Reserve Board above the amount required under the Federal Reserve Act. On May 11, 1921, the gold cover of the Federal Reserve note was 68.8 percent, which indicates a surplus of gold above the amount required by the Federal Reserve Act of some eight hundred million dollars. This increase in the gold ratio is not, however, due alone to the addition of gold to the reserve, but also to the notable contraction in the credit obligations of the Federal Reserve banks and in the contraction of the Federal Reserve note circulation in excess of two hundred million dollars during the year. Provided that the gold is not used as a basis for increased domestic credit or currency, it cannot have the effect of increasing commodity prices, but should to a marked degree, as the gold reserve builds up, reduce the interest rate, thereby encouraging production, and as consequence bring about a lowering of commodity prices. Furthermore, the effect of drawing upon Europe for this large amount of gold at this time has the effect of curtailing European purchase power in our markets, and if allowed to continue would still further impair the domestic purchase power of foreign currencies, which would be reflected in their purchase power in foreign markets. As a creditor nation we cannot escape the responsibility of still further extending credits to Europe until the industries of Europe have returned to a normal condition, as any other course would be to lessen the earning capacity of Europe to meet its obligations to

us. There is a decided difference between augmenting our gold reserve at the expense of Europe and by increasing the domestic production from our own mines. The situation in this respect is very critical, at the present moment the costs of gold mining not having declined. The need for temporary relief to tide the gold mining industry over this crisis is apparent. An increased production of new gold will invigorate the entire financial system of the nation, preserve a large volume of developed gold ore reserves which will otherwise be wasted, and will safeguard the gold standard in surviving this period of economic stress.

TRANSPORTATION COSTS AS A COST FACTOR IN BASIC INDUSTRIES

INTELLIGENT PUBLIC SYMPATHY has appreciated the difficult position of the railroads in regard to securing revenue to meet the operating costs and to obtain fair returns on the invested capital. Confronted with high operating costs in which the labor item has been the most important—and decreasing revenues due to business depression, the railroads have been ground between the upper and nether millstone. Obviously, the railroads must be afforded the opportunity of working out a practical solution of this difficulty.

At the same time for certain basic commodities, it can hardly be questioned that railroad transportation rates are so high as to prevent a revival of business movement. This is well illustrated in the transportation cost for assembling the raw materials necessary for the production of pig iron.

In the production of pig iron, there are three basic raw materials—iron ore, coke and limestone. The present transportation cost for assembling and movement of raw materials to produce a ton of pig iron in the Pittsburgh district is well over \$10 per ton. In some instances, the transportation cost for particular steel plants for assembling these raw materials amounts to \$11.50, which was approximately the 1913 cost of the finished product. Under these circumstances, it is almost impossible to believe there can be any large purchases of finished steel products in connection with the building trades and other important consumers, as long as transportation costs remain at their present figure. When it is realized that the increase in the transportation costs for materials entering into steel plates has been 109 percent, some realization is obtained of the way in which high transportation costs for basic commodities have hampered and prevented the resumption of normal business activities.

What is true of pig iron is equally true of other basic commodities. For instance, considerable quantities of coal are shipped from districts in western and central Pennsylvania to New England factories. The transportation costs for a gross ton of coal from the Johnstown district to the New England mills amounts to between \$4.50 and \$4.80 per ton. The transportation costs at the present time are almost double the actual cost per ton of the coal f.o.b. at the mines.

Transportation costs of such a character must of necessity act as a deterrent to increased business movement, and therefore tend to lower railroad freight revenue as well as to prevent a return to normal industrial production.

The reduction of railroad wages is, of course, a primary and essential factor in the reduction of railroad operating costs. Such wage reduction, however, must be followed with a substantial decrease and readjustment in the transportation rates on basic commodities. Without such reduction it does not seem likely that there can be a return for some time to the normal production and distribution of such articles.

The railroads, by a voluntary reduction of such high transportation rates, following the reduction of railroad wages, can do more to restore business confidence and to open the way for a revival of industry than any other single factor in the present business situation.

ANOTHER COAL FAMINE

FIENDISH wisdom combined with unlimited power could not produce conditions better designed to create a shortage of coal during the winters of 1921-22 than those which now exist.

Consumers of coal who are evidently anticipating that coal may be purchased at a lower price are entirely overlooking the fact that the wage scale agreement in the bituminous coal deal does not expire until April 1922. Approximately 80 percent of the mine price for coal is made up of the labor cost. Little reduction can be anticipated in any line of production cost. Idle mines, idle freight cars and idle men are now begging the opportunity to mine and distribute the coal supply which the nation will need next winter.

A consumer must learn that even with the excess production capacity of our mines that they are not able under any condition to produce a years' supply of coal in one or two months.

Coal production cannot be made until there is an available market. Sub-normal coal production cannot continue much longer without producing a coal famine, a runaway market, profiteering prices and all of those conditions for which the consumer blames the operator, but for which he is directly and solely responsible. The coal consumer who does not immediately make arrangements to supply his needs will surely regret his improvidence.

AMERICAN OIL COMPANIES

AMERICAN oil companies, fully alive to the necessities of the present situation, are steadily extending the development of their interests over-seas, particularly in Central and South American countries. The extent to which a number of large American oil companies have secured oil acreage in Colombia and other South American countries, is surprising, and it is the feeling among those best informed that Colombia will soon take its place as one of the great oil producing areas in the world.

The oil deposits in Colombia are both extensive and of high quality. They are found in formations which show a greater resemblance to American oil fields than to the oil areas developed in Mexico, where the steady encroachments of salt water have, and are lessening the output of some of the most important oil developments.

One American company, with extremely large holdings in Colombia, believes that Colombia is the natural future oil reserve for the United States, and that the production and distribution of oil from Colombia has many advantages over other oil developments. Colombia is nearer to the refineries of the Atlantic Seaboard than the Mexico fields, is closer to the markets in Europe, as well as to the refineries on the Pacific Coast and to the Oriental market. Colombia is, therefore, a strategic center for the production and distribution of oil.

In addition to extensive developments in Colombia and other countries in South America, a number of large American companies have secured important holdings in Rumania, which it is believed as soon as industrial conditions become more stabilized in Europe will prove to be

one of the richest and largest fields for oil development. American interests are well represented in the Rumanian holdings and there is an opportunity for further co-operation.

In view of the necessity of securing further oil reserves for the United States, it is essential that the National Government should continue as a permanent policy the present attitude of furnishing American investors abroad with full protection for their just and legitimate rights.

In times past, the American investor has seldom been able to secure a prompt and cordial response to his legitimate requests for proper support and protection in maintaining his rights and preventing discrimination against his interests. It is to be hoped that during the coming era, when there will be a steadily increasing opportunity for American investments abroad, and when such investments are themselves a necessary and primary factor in the development of additional outlets for American machine equipment, that the national government will appreciate the necessity of a vigorous and sound permanent foreign policy.

LOBBIES—WHAT OF THEM?

EVERY NOW AND THEN some orator who has run out of soap or some agitator who never used soap, reels off a few yards about a "powerful and insidious" lobby down at Washington. Sometimes it is called the "invisible government" and sometimes the "interests," but always it is "powerful" and, if not expressly used, the characterization "insidious" is always implied.

How come? How do they get that way? What is there inherently wrong in telling a legal representative of all the people just what you—one of the people—think he ought to do in a given set of circumstances? Let's think about it for a moment and see how utterly vapid and nonsensical all such references to the existence of a lobby generally are.

We have in Washington close on to six hundred Senators and Congressmen. Each of them hails from a particular state, but all of them are Senators and Congressmen of and for the whole United States. No one of them can possibly know all there is to be known about any one question upon which he is expected to cast a vote, let alone all that there is to be known about all of the issues which come before Congress. More than three thousand measures are pending now! The only manner in which they can arrive at the knowledge required in casting an intelligent vote is by acquiring information from persons who possess the facts, and naturally they are the interested parties, pro and con. In actual practice every bill is referred to a committee. The committee makes a thorough investigation and reports its conclusions, upon which the average member of Congress largely relies in casting his vote. These committees frequently call upon organizations representing the several industries to furnish the facts upon which their conclusions are to be based.

It must not be forgotten that for every person who wants Congress to do a certain thing there are one or more persons who oppose its being done. Under a republican government which professes to grant bona fide representation wherever it imposes taxation, each and every one of them is entitled to be heard. And the best way to make themselves heard is to go direct to headquarters and talk face to face with the men who have the deciding voice.

President Harding is not a recluse; neither is he an autocrat. His expressed desire to "get together and talk things over" is one of the strongest and most popular

planks in his work-a-day platform. Congressmen, Senators and administrative officials are glad to be advised, and not only accept advice from persons and associations resident in the capital but seek and secure additional guidance from other cities and rural communities. The lawmaker who would retire within the cloistered seclusion of his own impeccability and close the doors of his office upon his constituents would be an ingrate, an egotist, or a snob, if not a plain fool.

There are in Washington more than fifty organizations and, at times, thousands of individuals, looking after their own interests as affected by government. Included among them are the miners, the school teachers, the lumbermen, the prohibitionists, federated religious bodies, the merchants, the laboring men, the manufacturers, the soldiers, the consumers, the women and the farmers. Nearly every class which adds to the health, wealth or happiness of the nation is represented here. To condemn one of them is to condemn all, for they are all in the same boat.

Representatives of the farmers, by the way, were making their influence felt at both ends of Pennsylvania avenue before any of the other "powerful" organizations complained of were incorporated and before the grandfathers of our oldest lawmakers were born. In this circumstance is found the reason where there are no national laws burdensome to agricultural interests and the basis for the belief that an emergency tariff act for the protection of farmers would be one of the first laws passed by the present extra session of Congress. But the farmers are to be congratulated, not condemned, for thus protecting their own welfare, and similar praise should be accorded all other interests which pursue the same course. Had a greater number of organizations and individuals shown a disposition in past years to assist in the enactment, interpretation and administration of national laws, we would have fewer taxes and fewer laws and better laws today and the Administration would not now be confronted with such a heavy task in bringing about less government in business and more business in government.

The problems of today and tomorrow and the next four years concern us all alike. The quickest and most righteous way of effecting their solution is to get together and talk things over. The place to get together is Washington. Not by silence and aloofness can agriculture, mining, manufacturing and commerce best promote the public welfare, but rather by consultation and co-operation at all times with the constituted governmental authorities. If this amounts to lobbying—and it certainly does—then lobbying is to be encouraged and the country is to be congratulated that we have it.

Unless the man who rails against lobbying be a demagogue bidding for attention, he is generally found to be some one who has been opposed at Washington by some one who was more successful than he. Whoever can answer his opponent's arguments or checkmate his stratagems will do so without resorting to an attack upon his character.

This is a government of red-blooded men and women, by and for red-blooded men and women. It is wrong to think that citizens who come to Washington to make their wants known and their influence felt are crooks who need watching, and equally fallacious to assume that Congressmen and Senators are weaklings who need protection from powerful and insidious lobbyists. Let's cut out the erimination and reerimination, get busy and pull together. In the multitude of counsel there is wisdom.

WE DEMAND STABILIZATION

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Think how prosperous and contented the country would now be if steel had only been stabilized a few years ago. Steel is in general use in every walk of life and there is somewhat of a demand for it during all seasons. We can't get along without it, and can't get it unless we buy it, and can't buy it unless we pay freight from Pittsburgh, although it is manufactured in our own home town far away from Pennsylvania. This same condition prevails with respect to shoes and hats and talcum powder and shaving soap and corn salve. Stabilize them all. Then we will have no housing shortage, no last-season's lids, no corns, no shiney noses and no whiskers. How perfectly alluring are the possibilities of stabilization!

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The railroads, by a voluntary reduction of such high transportation rates, following the reduction of railroad wages, can do more to restore business confidence and to open the way for a revival of industry than any other single factor in the present business situation.

ANOTHER COAL FAMINE

FRIENDISH wisdom combined with unlimited power could not produce conditions better designed to create a shortage of coal during the winters of 1921-22 than those which now exist.

Consumers of coal who are evidently anticipating that coal may be purchased at a lower price are entirely overlooking the fact that the wage scale agreement in the bituminous coal deal does not expire until April 1922. Approximately 80 percent of the mine price for coal is made up of the labor cost. Little reduction can be anticipated in any line of production cost. Idle mines, idle freight cars and idle men are now begging the opportunity to mine and distribute the coal supply which the nation will need next winter.

A consumer must learn that even with the excess production capacity of our mines that they are not able under any condition to produce a years' supply of coal in one or two months.

Coal production cannot be made until there is an available market. Sub-normal coal production cannot continue much longer without producing a coal famine, a runaway market, profiteering prices and all of those conditions for which the consumer blames the operator, but for which he is directly and solely responsible. The coal consumer who does not immediately make arrangements to supply his needs will surely regret his improvidence.

AMERICAN OIL COMPANIES

AMERICAN oil companies, fully alive to the necessities of the present situation, are steadily extending the development of their interests over-seas, particularly in Central and South American countries. The extent to which a number of large American oil companies have secured oil acreage in Colombia and other South American countries, is surprising, and it is the feeling among those best informed that Colombia will soon take its place as one of the great oil producing areas in the world.

The oil deposits in Colombia are both extensive and of high quality. They are found in formations which show a greater resemblance to American oil fields than to the oil areas developed in Mexico, where the steady encroachments of salt water have, and are lessening the output of some of the most important oil developments.

One American company, with extremely large holdings in Colombia, believes that Colombia is the natural future oil reserve for the United States, and that the production and distribution of oil from Colombia has many advantages over other oil developments. Colombia is nearer to the refineries of the Atlantic Seaboard than the Mexico fields, is closer to the markets in Europe, as well as to the refineries on the Pacific Coast and to the Oriental market. Colombia is, therefore, a strategic center for the production and distribution of oil.

In addition to extensive developments in Colombia and other countries in South America, a number of large American companies have secured important holdings in Rumania, which it is believed as soon as industrial conditions become more stabilized in Europe will prove to be

one of the richest and largest fields for oil development. American interests are well represented in the Rumanian holdings and there is an opportunity for further co-operation.

In view of the necessity of securing further oil reserves for the United States, it is essential that the National Government should continue as a permanent policy the present attitude of furnishing American investors abroad with full protection for their just and legitimate rights.

In times past, the American investor has seldom been able to secure a prompt and cordial response to his legitimate requests for proper support and protection in maintaining his rights and preventing discrimination against his interests. It is to be hoped that during the coming era, when there will be a steadily increasing opportunity for American investments abroad, and when such investments are themselves a necessary and primary factor in the development of additional outlets for American machine equipment, that the national government will appreciate the necessity of a vigorous and sound permanent foreign policy.

LOBBIES—WHAT OF THEM?

EVERY NOW AND THEN some orator who has run out of soap or some agitator who never used soap, reels off a few yards about a "powerful and insidious" lobby down at Washington. Sometimes it is called the "invisible government" and sometimes the "interests," but always it is "powerful" and, if not expressly used, the characterization "insidious" is always implied.

How come? How do they get that way? What is there inherently wrong in telling a legal representative of all the people just what you—one of the people—think he ought to do in a given set of circumstances? Let's think about it for a moment and see how utterly vapid and nonsensical all such references to the existence of a lobby generally are.

We have in Washington close on to six hundred Senators and Congressmen. Each of them hails from a particular state, but all of them are Senators and Congressmen of and for the whole United States. No one of them can possibly know all there is to be known about any one question upon which he is expected to cast a vote, let alone all that there is to be known about all of the issues which come before Congress. More than three thousand measures are pending now! The only manner in which they can arrive at the knowledge required in casting an intelligent vote is by acquiring information from persons who possess the facts, and naturally they are the interested parties, pro and con. In actual practice every bill is referred to a committee. The committee makes a thorough investigation and reports its conclusions, upon which the average member of Congress largely relies in casting his vote. These committees frequently call upon organizations representing the several industries to furnish the facts upon which their conclusions are to be based.

It must not be forgotten that for every person who wants Congress to do a certain thing there are one or more persons who oppose its being done. Under a republican government which professes to grant bona fide representation wherever it imposes taxation, each and every one of them is entitled to be heard. And the best way to make themselves heard is to go direct to headquarters and talk face to face with the men who have the deciding voice.

President Harding is not a recluse; neither is he an autocrat. His expressed desire to "get together and talk things over" is one of the strongest and most popular

planks in his work-a-day platform. Congressmen, Senators and administrative officials are glad to be advised, and not only accept advice from persons and associations resident in the capital but seek and secure additional guidance from other cities and rural communities. The lawmaker who would retire within the cloistered seclusion of his own impeccability and close the doors of his office upon his constituents would be an ingrate, an egotist, or a snob, if not a plain fool.

There are in Washington more than fifty organizations and, at times, thousands of individuals, looking after their own interests as affected by government. Included among them are the miners, the school teachers, the lumbermen, the prohibitionists, federated religious bodies, the merchants, the laboring men, the manufacturers, the soldiers, the consumers, the women and the farmers. Nearly every class which adds to the health, wealth or happiness of the nation is represented here. To condemn one of them is to condemn all, for they are all in the same boat.

Representatives of the farmers, by the way, were making their influence felt at both ends of Pennsylvania avenue before any of the other "powerful" organizations complained of were incorporated and before the grandfathers of our oldest lawmakers were born. In this circumstance is found the reason where there are no national laws burdensome to agricultural interests and the basis for the belief that an emergency tariff act for the protection of farmers would be one of the first laws passed by the present extra session of Congress. But the farmers are to be congratulated, not condemned, for thus protecting their own welfare, and similar praise should be accorded all other interests which pursue the same course. Had a greater number of organizations and individuals shown a disposition in past years to assist in the enactment, interpretation and administration of national laws, we would have fewer taxes and fewer laws and better laws today and the Administration would not now be confronted with such a heavy task in bringing about less government in business and more business in government.

The problems of today and tomorrow and the next four years concern us all alike. The quickest and most righteous way of effecting their solution is to get together and talk things over. The place to get together is Washington. Not by silence and aloofness can agriculture, mining, manufacturing and commerce best promote the public welfare, but rather by consultation and co-operation at all times with the constituted governmental authorities. If this amounts to lobbying—and it certainly does—then lobbying is to be encouraged and the country is to be congratulated that we have it.

Unless the man who rails against lobbying be a demagogue bidding for attention, he is generally found to be some one who has been opposed at Washington by some one who was more successful than he. Whoever can answer his opponent's arguments or checkmate his stratagems will do so without resorting to an attack upon his character.

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voting the Republican ticket but in some states, at least, they actually insist on having the votes counted. The South needs to be stabilized. If the shipment of West Virginia coal to the Alabama fuel regions is to be forbidden through a zoning order, why not prohibit the shipment of Southern cotton to distant woolen mills. Cotton advances four dollars a bale and clothing jumps forty dollars a suit. More people use clothes than coal, and the demand is ninety-nine percent seasonal. Stabilize the clothing industry.

What of the House and Senate themselves? After nearly a century and a half, some of our lawmakers still disagree about the way things should be done. They introduce three thousand bills on the opening day and few others for thirty days. So many laws are considered that frequently the first we hear of a new one being born is when we learn that Senator LaFollette has talked it to death. Let's stabilize Congress.

By all means stabilize coal, but why stop with coal? Why stop anywhere? or at anything? At some season or other, we use everything, and everything we do affects somebody else. Let Congress stabilize everything we see, taste, smell, hear, and feel from the time we first open our eyes till we close them in our final sleep. That will take care of all our worries except the funeral. And the unions will stabilize that.

MADAME CURIE FORGETS TO PRESS THE BUTTON

THOSE WHO WITNESSED the brief ceremonies held in the auditorium of the Interior Department on Saturday, May 21, when Mme. Marie Curie was presented with a specimen of the first carnotite ore ever shipped and a block of the same substance as it is mined today, will never forget the illustration it afforded of a great scientist's consecration to and concentration upon her chosen work. The picture of the frail little woman who was oblivious to the personal honors a whole nation was bestowing upon her, and insensible to the fatigue which gripped her body, but keenly alive to and aware only of the unmeasured powers hidden in the mineral before her, will remain vivid in their memories long after they have forgotten that the remains of the late Chief Justice of the United States were lying in state and many other things of interest to the world were happening on that day.

Mme. Curie, who had come to dedicate the new cryogenic or low temperature laboratory of the United States Bureau of Mines, was feeling very weak, and was unable to respond to the very brief address of welcome delivered by Dr. H. Foster Bain, director of the Bureau. Because she was not strong enough to go down stairs and say the word to start the machinery of the laboratory, a special wire was hastily run to the stage of the auditorium so she could press a button and give a signal to the engineer. After making a statement to this effect, Dr. R. B. Moore, chief chemist of the Bureau, unwrapped a bottle and made the announcement that it contained two pounds of the first carnotite ore ever shipped. He laid it on the table, together with a bundle, wrapped in a newspaper, containing a lump of the same substance as mined today. Both had been sent by Gordon Kimball, of Ouray, Colo., owner of the Copper Prince Mine, to be presented to Mme. Curie.

"Mme. Curie will now press the button," Dr. Bain said.

But Mme. Curie did not press the button. She did not even take hold of the button. She was saying something to Dr. Moore.

He said afterwards that she was giving the address on which the ores were to be shipped and telling him that she meant to place them in a museum in Paris where they would be kept forever.

"Mme. Curie will now press the button," Dr. Bain repeated as he pressed the instrument into her hand. The hand closed automatically, but still no signal was sent to the engineer. Dr. Moore spoke to her but again there was no response. Her eyes were transfixed upon the bottle of yellow ore, and to all outward appearances she did not know there was anything else in all the world. At this juncture Mrs. Robert Woods Bliss, chairman of the Madame Curie Reception Committee of Washington, spoke to her as Dr. Bain and Dr. Moore had done. The combined and contemporaneous efforts of the three were successful, and Mme. Curie without turning her head pressed the button which signalled the beginning of a new effort in the production of helium gas, which has revolutionized aerial navigation and the science of warfare. Then she rose, picked up the bottle of ore, looked at it, fondled it, and yielded it reluctantly to Dr. Moore. When he wrapped it up she smiled and her thoughts returned to the world.

The first carnotite ore ever shipped, in 1898, was refined for its vanadium content. Dr. Moore said it has been estimated that the amount used for this purpose contained enough radium to yield the gram which Americans have given to Madame Curie.

Scientific data obtained at the cryogenic laboratory will be used at the government's plant for extracting helium from natural gas at Petrolia, Texas. On the Sunday following the dedication Madame Curie, feeling stronger, returned to the Interior Department and made a thorough inspection of the laboratory in operation.

UTAH CONVENTION COMMITTEE FORMS WORKING ORGANIZATION

THE COMMITTEE appointed by Governor Charles R. Mabey to handle the matter of Utah's representation and exhibit at the Mining Congress convention and National Exposition of Mines and Mining in October formally organized April 28 by electing Ernest Bamberger chairman, J. A. Barclay vice-chairman and M. H. Sowles, treasurer. Governor Mabey met with the committee and promised the cordial support and co-operation of the administration and himself personally to the movement. He said he hoped to attend the Chicago convention as a member of the Utah delegation. The Governor was made honorary chairman of the committee by acclamation.

A sub-committee met a few days later at the offices of the Utah Chapter of the American Mining Congress and arranged for investigations preliminary to making a report and recommendations to the committee at an early date.

DEATH COMES TO UTAH OPERATOR

JUDGE NORMAN W. HAIRE, for several years a Director of the Utah Chapter, American Mining Congress, died at his home in Salt Lake City April 22. He was a native of Michigan, where he practiced law, served fourteen years as judge of the Thirty-second Circuit Court and subsequently was an officer of the Bigelow Mines syndicate. He moved to Salt Lake City in 1912, where he became president and general manager of the Michigan-Utah Consolidated Mines Company, a position he held until the state of his health compelled his retirement from active business about a year ago.

A GENERAL SALES TAX IS INEVITABLE— WHY NOT NOW?

BY REED SMOOT

U. S. Senator from Utah

AFTER giving considerable study to the wisdom of enacting into law a general sales tax, three alternative propositions appear as a basis for such tax which, stated briefly, are as follows:

1. A rate of one-half of 1 percent, but not to exceed 1 percent, on all sales without distinction of integrated or unintegrated concerns.

2. A rate of three-fourths of 1 percent, but not to exceed 1½ percent, with a credit for taxes previously paid on goods bought for resale.

3. A rate of 1 percent, but not to exceed 2 percent, without distinction of integrated or unintegrated concerns, but exempting each dealer on the first \$50,000 of annual sales.

For simplicity of administration and collection of the tax, I have concluded to support the first-named plan, and for the purposes of this bill have specified a rate of tax of 1 percent. If at any time the amount to be raised from such a tax is to be reduced or increased, the only amendment required to the law would be to change the rate of tax.

The bill I have offered follows closely the provisions of the Philippine sales tax and today is the most satisfactory tax to all classes and the most productive that is imposed in the islands.

Attention is drawn to a brief explanation of the principal provisions of the bill. Later, when the revision of the revenue law is before the Senate, I shall take pleasure in discussing it in detail.

A general sales tax is a tax on the gross value of goods, wares, and merchandise, whether raw material or manufactured or partially manufactured products, whether of domestic or of foreign origin, and such as are generally sold or exchanged and delivered for domestic consumption, whether in barter or on a cash, credit, or installment basis, which tax shall accrue at the time of sale or lease of all such goods, wares, and merchandise, at a rate of 1 percent of their total value at the time of such change of ownership. This tax also applies to the total amount or amounts received on all leases of goods, wares, and merchandise.

The proposed exemptions are all sales and leases are exempt from this tax when made by—

(1) The United States or by any State or Territory, or political subdivision thereof, or by the District of Columbia, or by any Army or Navy commissary or canteen.

(2) By any foreign government.

(3) By any mutual ditch or irrigation company.

(4) By any hospital or by any corporation organized and operated exclusively for religious, charitable, scientific,

or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private stockholder or individual.

Sales and leases of the following goods, wares, and merchandise shall also be exempt from this tax:

(1) Such as are sold or leased for export and in due course are actually exported.

(2) Such as are subject to the taxes imposed in titles VI and VII of the revenue act of 1918; i. e., beverages, cigars, tobacco, and manufactures thereof.

(3) Such as are subject to the taxes imposed in paragraphs (1), (2), (3), (12), and (20) of section 900 of the revenue act of 1918; i. e., automobiles, automobile trucks and wagons, motor cycles and tires, parts and accessories; dirk knives, stilettos, etc.; yachts, motor boats, etc., to be used as pleasure boats.

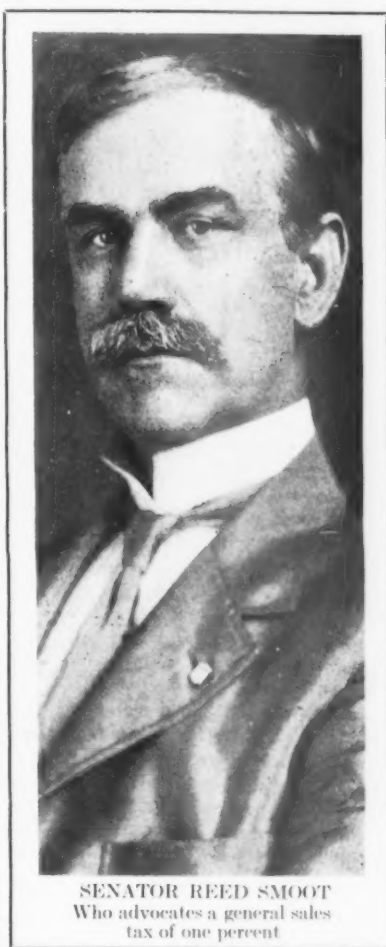
(4) Total sales and leases on goods, wares, and merchandise which in any taxable year do not exceed \$6,000.

Its advantages when compared with other taxes are (a) its extreme simplicity of assessment and collection. The employment by the taxpayers of costly tax experts is quite unnecessary as is the burdening of the tax administrative machinery with complicated, expensive and long drawn-out audits causing long delays in the collection of taxes. It is not inquisitorial; it does not raise difficult questions about losses, depreciation, and the like; it is more easily allocated among competing jurisdictions than a tax upon net income. No revenue defrauder in the Philippines ever claimed ignorance of the law in palliation of his offense.

(b) Each taxpayer pays out of his gross income his sales tax and automatically grades the amount according to his ability to pay; this grading is far more exact, scientific, and equitable than are the artificial steps or brackets imposed by the net income tax system of existing revenue laws. Under a sales tax the taxpayer pays as he goes along and does not feel the burden, while

under the existing revenue law hundreds of thousands of income taxpayers are today, when reduced incomes are the rule, greatly harassed by the payment of taxes which accrued a year ago when incomes and profits were greater than they are today.

(c) The tax rate is low and uniform on all goods, wares, and merchandise. The fact that it applies alike to all mercantile transactions makes possible for great productivity, together with a low tax rate. The absence, in the Philippines, of discriminatory tax rates leaves all taxpayers



SENATOR REED SMOOT
Who advocates a general sales
tax of one percent

satisfied (1) because all pay the same rate and (2) because goods sufficiently similar to be competitive, even though not identical, are taxed alike. The high discriminatory tax rates imposed under existing revenue laws appeal to the taxpayers as extremely unfair and are resented by them. This is the main cause why the tax administration has thrown up its hands, recommending the repeal of some of these consumption taxes, because they say they are easily evaded and too costly to collect.

(d) The taxpayer can tell to a cent and with absolute certainty and with a minimum of effort at the close of busi-



—In Minneapolis News

IF AS ADVERTISED

ness each day exactly where he stands as to profits and tax liability. Under the complicated existing excess-profits tax the taxpayer never knows, to a certainty, what amount of profit he has to add to his business to come out whole. Naturally he adds all he thinks necessary, and experience has demonstrated that in many cases he has doubled or trebled the amount, all of which inevitably results, as the goods pass along to the ultimate consumer, in a pyramiding of prices. An investigation made by the Department of Justice in connection with the Lever Act tended to show that as a direct result of the unwise and complex provisions of the excess profits law the prices of certain commodities to the ultimate consumer were increased over 23 percent. A simple, sane, intelligible sales tax at a rate of 1 percent, even though pyramided several times, would nevertheless be but a fraction of 23 percent and would certainly result not in an increase but in a substantial reduction of the present high prices of necessities.

The results of the general sales tax in the Philippines during the first sixteen years of operation:

(a) It has become the most productive item in the insular tax system.

(b) It has not hampered any type of business or manufacture in the island; it is precisely during the life of the sales tax law that commerce and industry of all kinds have thrived as never before.

(c) The Philippines Government is enthusiastic over the results of the sales tax and so cabled the Secretary of

the Treasury in Washington four months ago, stating that their sales tax was the "most equitable, productive, simple, and economical" tax they had; that the original tax rate of one-third of 1 percent had been increased to a full 1 percent; and that the Philippine Government was then (December, 1920) considering the advisability of again increasing the tax rate, this time from 1 percent to 2 percent per turnover.

(d) Prominent merchants with offices in Manila and New York City have in printed statements been equally as enthusiastic over the operation of the sales tax law as is the Philippine Government, as quoted in the foregoing paragraph. Industrial and commercial methods and conditions in the Philippines have, during the last 22 years, become thoroughly Americanized, as scores of reputable witnesses—formerly in the Philippines and now in this country—are willing to testify. All of which should be sufficient to prove an error in judgment on the part of those in this country who have, on scant knowledge of their own, condemned the Philippine sales tax as being in principle rank economic heresy and in operation impracticable.

Normally, the entire taxes paid on each turnover are shifted and rest finally on the ultimate consumer. This because the purpose of all business is profit and the cost of goods includes every item of expense such as raw material, labor, freight, rent, traveling expenses, interest, selling expenses, losses, and taxes. All of these items are normally shifted to the ultimate consumer. It can be demonstrated with mathematical accuracy that even with a half a dozen turnovers, and the corresponding 1 percent taxes, the price of commodities to the ultimate consumer is very rarely increased over $3\frac{1}{2}$ percent. Compare this with the 23 percent increase resulting from the operation of the excess-profits tax. The $2\frac{1}{2}$ or $3\frac{1}{2}$ percent tax content in commodities bought by the ultimate consumer means that a lot of goods which, sales tax paid, cost him \$102.50 to \$103.50 would, without the tax, cost only \$100. But as a matter of fact, the sales tax encourages thrift and eliminates the 23 percent which the operation of the excess-profits tax now loads on many commodities. Therefore the net result of a moderate general sales tax rate would be a considerable reduction to the ultimate consumer in the value of the \$100 worth of goods in the example given above.

Compared with the merchants' and manufacturers' ordinary profits on each turnover of goods, the 1 percent sales tax is so small that it was found, after many years' experience in the Philippines, that normally in ordinary commercial transactions very little attention was paid to the tax. Under abnormal conditions, where the profits were larger than usual the sales tax was absorbed.

We must consider how a 1 percent sales tax on final output affects (1) a large integrated concern with, say, six multiple processes between the raw material and the finished product as distinguished from (2) a half a dozen independent concerns, each performing one of the six multiple processes, performed by the integrated concern, and each paying a 1 percent sales tax on their output of the partially manufactured product.

The natural assumption would be that the six independent concerns amongst them would pay six times the amount of sales tax that the integrated concern would pay on the same output. But this assumption would be wrong, for the following reasons:

(a) Each of the six independent concerns would shift along to the next independent manufacturer in line all of the original costs of raw material plus the various costs at that stage of the partially manufactured product plus his own profit and the compound profits of the manufacturers who had preceded him and add the 1 percent turnover tax to the bulk sum of all these items. The total

of these six profits en route would make the finished product to the ultimate consumer several times the amount for which the first independent manufacturer purchased the raw material. Therefore, instead of 6 percent—1 percent on each turnover—the tax content of each dollar the ultimate consumer paid for a finished product would, normally, range between $2\frac{1}{2}$ percent and $3\frac{1}{2}$ percent.

(b) The integrated, multiple process concern would add merely the cost of production in each of its processes to the partially manufactured goods entering the next process and add to the total cost its profit, together with 1 percent of the total sale price of the finished product, which is normally sold in competition with and at approximately the same price as similar finished products are sold by the last one of the six independent manufacturers.

Therefore, the advantage which the large integrated concern would have over each of the independent concerns would be from two-fifths to three-fifths of 1 percent—that is, $2\frac{1}{2}$ percent or $3\frac{1}{2}$ percent divided by 6. But as independent manufacturers, large and small, have thrived and continue to thrive alongside of large integrated multiple-process concerns the natural assumption is that they will continue to thrive, regardless of a fraction of 1 percent advantage. Whether this advantage will be used is doubtful. So far the large concerns have shown no disposition to drive their small competitors out of business. No doubt the large manufacturer is more than satisfied to allow his small competitor to set the price.



IN THE DOCTOR'S CONSULTING ROOM

Logically competition and the sales tax would result in an increase of 1 percent or 2 percent or 3 percent to the ultimate consumer, and the repeal of the excess-profits tax would result in a decrease to the ultimate consumer of several times that amount. As for the small independent manufacturer and the large integrated multiple-process concern, they should continue in the future, as they have in the past, to operate alongside of each other.

If the sales tax bill becomes a part of the revenue laws of our country Congress can repeal not only the items provided for in the bill as presented by me, but can repeal

all of the irritating, nagging, discriminatory taxes amounting to hundreds of millions of dollars, and the excess-profits tax, the result of which has worked such havoc with the business concerns of our country, which have



STEADY-Y-Y-Y BOYS!

Toledo News-Bee

in many cases been compelled to pay the excess-profits tax on paper profits.

I have received a few letters of complaint against a general turnover tax from concerns doing business on an average of 2 percent to 3 percent profit on their turnover sales and claiming that if the 1 percent sales tax is imposed it would ruin their business. Perhaps in some cases the imposition of the tax, if it had to be paid by the merchant, would seriously cripple their business; but such concerns must understand that the tax imposed is to be paid by the purchaser. It is to be added to the regular price charged for all goods sold. If the merchant desires to absorb the tax there is no objection to his doing so, but the law does not contemplate any such result.

Some day not far distant America will have a general sales tax law and with new forms of pensions and bonuses that will become a heavy drain upon the Treasury, together with the $2\frac{1}{2}$ percent sinking fund for retirement of the public debt and nearly \$1,000,000,000 of interest to be paid annually upon the government obligations, the sooner a general sales tax bill is enacted into law the better it will be for America.

REVENUE BUREAU OFFICIAL RESIGNS

C. F. POWELL, Chief of the Subdivision of Natural Resources, Income Tax Unit, Bureau of Internal Revenue, has resigned, effective July 1. Mr. Powell, who some months ago succeeded J. C. Dick, of Salt Lake City, as head of the division that concentrates on the taxation of mining and other natural resources, will enter the practice of oil engineering with headquarters in New York City.

Mr. Powell joined the Income Tax Unit as petroleum valuation engineer two years ago, after operating experience in the fields of Kansas, Oklahoma and Texas. Four months after the beginning of his service with the government he was promoted to Chief of the Oil Section of the Natural Resources Division, subsequently being advanced to the captaincy of the division upon the retirement of Mr. Dick.

THE GENERAL SALES TAX—ITS DISADVANTAGES OUTWEIGH ITS VIRTUES

BY H. B. FERNALD

Member of the American Mining Congress

AFTER EXPERIENCE with a sales tax in both the Philippines and Mexico, certain definite arguments in its favor must be recognized. It is a relatively simple tax to define by law and regulations, provided it is to be a general sales tax at a uniform rate, not complicated by numerous exemptions. It could perhaps be collected by a fairly simple procedure, although it is not so collected in either the Philippines or Mexico. It would undoubtedly yield a large revenue and be more constant in its yield than an income tax. It would give the government substantial revenues, even though they came from business which was making no profits or laboring men who were unemployed. It would spread the tax burden more evenly throughout all sections of the country and among all classes and conditions of the people.

These arguments may fairly be urged for it, but they are not the main arguments which have been advanced to gain for it the popular support.

One of the principal arguments has been that a sales tax law has been successfully administered in the Philippine Islands and that, therefore, it would be successfully applied in this country. This seems a valid argument to those unacquainted with the provisions of the Philippine law, the history of Spanish tax systems, and the form and organization of the Philippine Government. The force of this argument disappears almost entirely when we consider the following facts:

(1) The Philippines are essentially an agricultural country. There is no general manufacturing of goods for local consumption. The largest trading enterprises are concerned with the purchase of agricultural products for export and the importation of foreign goods for sale in the islands. The law exempts from the sales tax (a) Importers, on foreign goods imported by them; (b) Agriculturalists, on products actually raised by them, consumed by them or sold to local dealers or to exporters; (c) Exporters, on all goods exported; (d) Merchants whose annual sales do not exceed in value \$250. This results in exempting from the sales tax the larger part of the important business activities in the islands. For example, some of the largest concerns are engaged in importing goods which, through their agents, are sold to agriculturalists in exchange for the agricultural products which are then exported to foreign countries, with no sales tax whatever applying on such transactions. The result is that the Philippine sales tax yields about 70 cents a year per capita, although the present tax rate is three times that

originally imposed. The tax as applied in the Philippines manifestly is not such a general sales or turnover tax as is being urged for this country.

(2) Stamp and sales taxes have been an essential part of the revenue policy in all Spanish countries. The people have been accustomed to the official stamping and scrutiny of practically all their transactions. I still have my old copy of the Spanish Commercial Code which by Royal Decree went into effect in Spain in 1886, superseding the prior Code of 1829. By similar Royal Decree it was, with only slight modifications, applied to Cuba and Porto Rico and to the Philippines.

Among the provisions of this Code, were those prescribing the books which every merchant must keep,—a book of inventories and balances, a day book, a ledger and a copying book for letters and telegrams,—all bound books, ruled and paged, which had to be presented, before they were put into use, to the municipal judge of the district, so that they might be duly registered and every leaf of each book duly stamped and sealed. Every business transaction for cash or credit must be entered through the day book and posted to the ledger, by order of dates, without leaving any blanks, and without any interpolations, erasures or changes. Any errors were to be corrected by contra entries giving full explanation with regard thereto.

This was only part of their fundamental business law, and it was coupled with stamp taxes of all kinds. Business did not thrive and develop under it, but it formed the basis for the ready acceptance by the people of the sales tax. It even made them ready to submit to the serially numbered stamps which Mr. Hord, as collector of Internal Revenue, insisted were an important feature in preventing evasion of the tax. Careful record had to be kept of the serial numbers of all stamps purchased by each merchant so that inspectors could check up and see that each merchant was using the stamps which he had himself purchased, thus not giving him any opportunity to obtain and use stamps

other than those he had purchased from the Internal Revenue offices on filling out official forms which served to register him as engaged in a business subject to the tax.

I did not then think, and do not now believe that, the serially numbered stamps were a necessary feature of the tax. I only cite them to illustrate the difference in temperament and habit of the people in the Philippines from those in this country. Give our people here the experience



H. B. FERNALD

Who appeared before the Finance Committee of the Senate in opposition to the general sales tax, as the result of his experience in Mexico and the Philippines.

of a generation under the Spanish Codes and we could argue that they would accept the sales tax and even the serially numbered stamps. But without such experience, the Philippines sales tax constitutes no precedent for this country. There is no reason for believing our people would accept the Philippines sales tax itself when we know that they would not accept the methods successfully used in the Philippines for its collection.

(3) In the Philippines the insular government had a tax collector in every town, because municipal treasurers acted as collectors of insular revenues. To have equal facilities here, we should have to create a federal tax office in every town, and make the Treasury Department almost a rival of the Postal Department in number of employees. We could not, therefore, compare our cost of collecting the tax here with that of collecting it in the Philippines. Here again Philippine conditions fail as a precedent for this country.

Mexico has had a general sales tax, and, under the Mexican Federal Stamp Tax Law of 1906, with which I was familiar, stamp taxes were also applied to payrolls, to checks, to almost all forms of contracts and agreements, to marriage settlements, to ante-nuptial donations, to lotteries and raffles, to government concessions, and practically every kind of financial transactions. There were 102 different class of stamp taxes set forth in this law, including a tax of 5 cents for each leaf of the day book, ledger and balance book, which merchants must keep to comply with the Commercial Code, and a tax of 1 cent for each leaf of the sales books which must be kept for every business habitually making sales. The Mexican law follows the old Spanish Code in its requirements for all these books, and the officially registered sales books are the essential basis for checking up the correctness of the sales taxes paid.

The Mexican system is no more a precedent for this country than is that of the Philippines. I do not pretend to say whether their business law and tax systems have been responsible for the failure of business to develop in these Spanish countries or whether it is the absence of the proper commercial temperament which is responsible for the existence of such laws and tax systems. Which-ever it may be, these countries do not constitute a revenue or business precedent for us.

Sales tax advocates make very positive statements that a general sales tax would, even with a large number of turnovers, mean an increased cost of only $2\frac{1}{2}$ percent to $3\frac{1}{2}$ percent to the ultimate consumer. Calculations are made showing that on a loaf of bread the tax would be less than one-sixth of a cent, on a rubber tire the tax would be about $3\frac{1}{4}$ percent of the price to the consumer, and on a suit of \$60 clothes the tax would be 2.61 percent of the price to the consumer. The figures seem convincing, as they start with the raw material and follow through the several stages of production, with a calculation of the sales tax at each stage. The tables are, however, entirely fallacious in that they fail to take into account the effect which a sales tax would have on the many items of cost of manufacture other than the basic material.

For example, for the loaf of bread it is not the wheat and flour alone on which the sales tax would be levied. It would also affect every other item of expense from original producer to final customer. Coal, for example, will be subject to the sales tax, with one or more turnovers before it reaches the miller or the baker, so that in some form or other the sales tax applicable to coal must be reflected in the cost of the loaf of bread. But we cannot consider merely the tax on the sales of coal itself; we must consider the tax involved in every item which enters into the cost of coal. Railroad freight is an important item both in coal and in wheat, and we cannot expect railroad freight not to be increased if the railroad is having the

cost to it of all the materials it uses increased even 2 percent to 3 percent by the sales tax.

Of course, when we attempt to figure the increase of freight due to the sales tax on steel rails, and the cost of rails increased by the sales tax on coal and coke and by the increase in freight on coal and ores, we get into an endless chain. The same endless chain develops if we try to take the barrels in which the flour is shipped, or any one of the many other items which, if increased, would give an increased cost for the loaf of bread.

But we cannot figure merely on an increase in cost of commodities due to the sales tax. No one can pretend to urge that the sales tax would give an increased cost of even 3 percent in commodities without allowing a compensating increase to labor. If we are to assume a general increase in commodities proportionate to the tax paid on their sales, we must assume a corresponding increase in wages. If, therefore, we wish to calculate the increased cost of the loaf of bread we must take into account not merely the sales tax on each dollar of commodities, but also a similar amount on each dollar expended for labor. This again leads to the endless chain which I think no one can try to measure.

We may admit that it is probably no more difficult to figure the effect of a sales tax upon prices than it is to figure the similar effect of any other tax. The sales tax does not, however, possess the particular advantage that a simple calculation can be readily made to show its exact effect upon selling prices. Any problem is simple of calculation if all bothersome factors are ignored and no attention paid to the correctness of its solution. The sales tax does tend to pyramid, and the tables prepared are incomplete and misleading and do not reflect the actual results which a sales tax would have. My own best estimate is that the calculations are at least 100 percent to 200 percent in error.

I might in this connection say that I think the statements made as to the great increases in price which resulted from the Excess-Profits Tax Law are entirely unwarranted. Today, with the Excess-Profits Tax Law in effect, we have a large range of commodities selling at far less than they were in the early part of 1917 before the Excess-Profits Tax Law was enacted. The same tax laws are in effect today as were in effect a year ago. It is not a difference in tax laws, but a difference in supply and demand, that makes the difference in prices.

No one, I think, can say that if the sales tax law were enacted prices a year from now would be higher or lower than they are today, but this is no justification for a set of calculations which purport to show the cumulative effect of the sales tax on commodities but ignore many other elements essential to a proper calculation.

The mere fact that the advocates of a sales tax have made use of some unsound arguments would not warrant opposition to the tax itself. I have already referred to the fact that I did not consider there to be anything essentially unsound and wrong in a sales tax. Perhaps it is not really subject to any greater criticisms or to any worse defects than apply to some other tax plans. There is no tax which can be relied on to apply with uniform fairness and equity to all the taxpayers of the country.

It is not, therefore, because the sales tax is not a perfect tax that I feel opposed to it, but it is because I am satisfied that the sales tax, being what it is and working as it would work, would not be satisfactory to the people of the country. If enacted, I am convinced it would breed such dissatisfaction that it would be promptly repealed. It would, therefore, be a backward step, since we would again find ourselves no nearer a permanent financial policy for the government than we are today, and would have a largely increased feeling of distrust and dissatisfaction with the fiscal policies of the government and a

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lack of confidence in those now charged with their administration.

The sales tax is undoubtedly a consumption tax intended to spread the burden of taxation proportionately to consumption instead of having it fall proportionately to income. The great consumers of the country are the farmers and the laboring men, and no one wishing to stir up dissatisfaction and discontent would want a better argument than to tell them in season and out of season that the sales tax was merely a device to transfer the tax burden from the wealthy manufacturers and traders, and from the capitalists and speculators, to the poor laborers and farmers, and to their wives and children.

In spite of all the arguments which may be offered that the sales tax would be only a minor part of the sales price of the goods, we know from our general experience that our farmers and laboring men and their wives will be told as they go to make their purchases in the stores that the prices were up because of the sales tax. Perhaps this may not be used as an argument for increasing present prices, but it would certainly be used as an argument against their decrease. It is such a good argument for the storekeeper that we could not expect that he would fail to use it. I do not see how we could hope under such conditions that the farmers and laboring men would not believe that the sales tax was placing on them a burden which, through some form of income taxes, or by luxury taxes, should be met by others. If we were faced with the absolute need of revenue, with no possible means of raising it other than the sales tax, I would, of course, feel that it should be adopted and the possible dissatisfaction should not deter necessary steps in the reconstruction of our government's finances. I do not, however, feel that we are in that condition, and I therefore believe that it would be a great mistake to impose a sales tax, recognizing, as we must, the dissatisfaction to which it would give rise.

The question is not essentially one of substituting a sales tax for the excess-profits tax. The excess-profits tax should be repealed because it is bad. Whatever argument may have existed for it as a war measure does not exist today. It did raise a large war revenue, but it has the fundamental defect that it puts a premium on wealth and extravagance as opposed to energy and economy. The wealthy corporation with a large "Invested Capital" pays little or no tax, whereas the smaller corporation with less capital and perhaps good credit, in trying to build up a new business may pay the maximum tax rate. We need today to encourage, rather than to discourage, energy and economy in business, and we should not make large wealth necessary in order to avoid a high excess-profits tax rate.

Anyone who has had extensive experience with this Excess-Profits Tax Law can recognize this and many other defects which make it work out in a very unfair manner. The Excess-Profits Tax Law cannot be amended to eliminate these features, since they are inherent in the standard of "Invested Capital" on which it is based. It is because of its many and irremediable defects that the law should be repealed.

With this law repealed, we should then proceed to raise in the best manner possible the amount which is essential to the proper and economical conduct of the government. This, I think, can be raised in methods which would be much less objectionable to the country than the proposed sales tax.

INVESTIGATIONS BEING MADE BY BUREAU OF MINES

AN OUTLINE of the work being carried on by the Bureau of Mines, at its own stations and elsewhere in co-operation with producing and manufacturing companies, discloses a wide and interesting range of activities.

Volatilization of low-grade lead and zinc ores, lead fume problems and the recovery of silver, lead and copper from low-grade and complex ores are being studied at the University of Utah. The Arizona Copper Company is providing a twenty-ton leaching plant at Clifton, Arizona, for determining problems met with in leaching partly oxidized copper ores. Experimental work in volatilizing silver and lead from ores and reducing the gases to metallic bullion is being conducted in co-operation with Morris P. Kirk of Harbor City, California. Mr. Kirk furnished at his own expense the necessary plant and machinery.

Improved methods of mining, treating and marketing iron ores are being studied in co-operation with the North Carolina Geological and Economic Survey.

In co-operation with the Northwest Magnesite Company, the bureau is studying methods of producing high-grade caustic-burned magnesite. Investigations of methods of treating ores and producing coal are being made in conjunction with the Oregon Bureau of Mines and Geology. A safety and health campaign is being conducted, and improved uses of electricity and explosives are being studied, in co-operation with the Utah Industrial Commission.

A study of combustion of powdered fuels is being made in co-operation with the Combustion Engineering Corporation of New York. Efficient heating and ventilation methods and allied subjects are being investigated at Pittsburgh in co-operation with the American Society of Heating and Ventilating Engineers.

Possibility of utilizing Illinois coals instead of eastern coals for making gas, and mine ventilation and coal washing, are being studied at the University of Illinois. Washington and Alaska coal problems are being studied at the University of Washington. Answers to the usual wide range of coal questions are being sought at Pittsburgh by the bureau and the Carnegie Institute of Technology. The Pennsylvania Geological Survey is co-operating in the special work of sampling and analyzing Pennsylvania coals and making approximate heat determinations. Investigations concerning preparation of coal for shipment and marketing, securing of increased efficiency in use, and the development of improved grading and classification methods, are still being carried on in co-operation with the Tidewater Coal Exchange of New York and the Sewall's Point Coal Exchange of Norfolk.

Interesting investigations being carried on in co-operation with commercial concerns include: Exact facts regarding the use of liquid fuel in domestic heating in a device known as "Nokol," with the Steam Corporation of Chicago; efficiency of Trent processes for cleaning fuel, with the Trent Process Corporation of Washington, D. C.; use of natural gas in the home, with the Equitable Gas Company, the People's Gas Company and the Manufacturers' Light & Heat Company, all of Pittsburgh; practical application of Jefferies-Norton processes for the recovery of helium from natural gas, at Petrolia, Texas, with the Jefferies-Norton Corporation of Worcester, Mass.; explosive components for a detonating device, with the Dupont Company; smokeless combustion of bituminous coal, with the General Boilers Company of Waukegan, Ill.

WILSON URGES CONGRESS TO QUIT JUGGLING TAXES AND REDUCE THE BURDEN

SUGGESTING TO THE GOVERNMENT "the most profitable investment in the world—a billion dollars for a few picayunes," Robert G. Wilson, Chief of the Tax Division of the American Mining Congress, Washington, appeared before the Committee on Finance of the Senate in advocacy of a Federal War Tax Settlement Board and other measures to clean up the income and profits taxes for war years still outstanding.

"The solution of the problem of replacing the excess profits tax is right at the finger tips of Congress," declared Mr. Wilson. "My purpose in appearing before the committee is not to urge the consideration of any particular tax plan, but rather to call attention to the feasibility of actually reducing the volume of taxes."

"In April 1920, the American Petroleum Institute, the National Industrial Conference Board and the American Mining Congress, jointly representing about thirty other organizations, called a National Tax Conference at Chicago. Due to the dissatisfaction with the Revenue Act of 1918 then evidenced, a committee of fifteen was appointed to meet frequently and study the subject, with the view to presenting a committee report of recommendations for corrective legislation. That report has been issued in final form, following revision prompted by the second and third national conferences held in New York in October 1920 and January 1921. It is known as the 'Report of the Tax Committee of the National Industrial Conference Board on the Federal Tax Problem.'

"In Denver last November the American Mining Congress, at its twenty-third annual convention, unanimously adopted resolutions recommending the repeal of the excess profits tax. We did not advocate any specific substitutes at that time. The report of the National Industrial Conference Board Tax Committee, otherwise known as the Allied Tax Committee, had not been completed. The Mining Congress had two representatives on that committee; another member of the Mining Congress Tax Committee was an adviser to the conference committee. The delegates to the Denver convention were urged to communicate their suggestions to the Conference Committee."

"The present problem of federal taxation is not concerned alone with the urgent need for reformation of the revenue laws. No less important to the government and to industry is the prompt and decisive determination of war tax liabilities for prior years. Therein lies the possibility for a lowering of future taxes."

"Considerably more than a billion dollars of income and profits taxes, long past due, remains uncollected. A fraction of it never will be collected under any circumstances. Unless radical steps are taken immediately twenty percent or more never will be collected. A comparatively negli-

ble investment at the present time should actually save the government a quarter billion dollars and bring in more than a billion dollars additional during the next two years—probably fully a billion and a half. The saving in interest alone would prove a highly successful return upon the investment. The total saving, including the salvage of taxes that are being lost in the mazes of computation and collection difficulties, should make the investment the most profitable in the world. That is the immediate and perhaps the most important consideration. There are other incentives."

"The prolongation of the volume of war taxation is sufficiently distressing without the indeterminate settlement of obligations incurred by business three or four years ago. We are mindful of the restriction upon industrial expansion, the worry and harassment of uncertainty and delay, the impending mass of complex litigation, and in general the whole gamut of economic waste and distress. Congress faces a heavy responsibility. Business is becoming impatient. The whole situation is becoming actually dangerous."

"The American Mining Congress suggests two remedies: First, the creation by Presidential appointment of a temporary board to be known as the Federal War Tax Settlement Board, authorized not only to pass upon and settle cases consequent upon the war-time period, but to compromise in simple equity the disputes that appear hopeless under interpretative application of the laws. Second, men and other means for the Income Tax Unit of the Bureau of Internal Revenue to function effectively."

"The Income Tax Unit is rapidly approaching chaos. The average wage paid to its 5,500 employes in Washington is but \$1,650. That is the average paid to men who are supposed to be qualified to determine the correctness of million dollar taxes. No new men have been acquired since April 1. No funds are available for promotions due July 1. If no salary increases are made at that time a veritable army of the employes will seek positions elsewhere."

"Thirty-seven percent of the Income Tax Unit personnel resigned during 1920. This percentage is more significant than appears, for the reason that the 37 percent constitutes almost

entirely a loss of the most able men, who have sacrificed whatever advantages may exist in governmental service for the advantages of employment by private interests, however temporary such new employment may be."

"The invested capital of 50,000 corporations remains to be determined for the year 1917 alone. For the year 1918, only 60 percent of all tax returns, both personal and corporate, have been investigated; for the year 1919 only 10 to 15 percent."



ROBERT G. WILSON.

Chief of the Tax Division of the American Mining Congress, who appeared before the Senate Finance Committee in support of proposals to create a Federal War Tax Settlement Board, increase the personnel and efficiency of the Revenue Bureau and reduce future taxes.

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"A lowly eighteen hundred a year auditor can with little effort shake \$100,000 per annum right out of the bushes; a more efficient auditor can produce millions. The Unit has assessed as high as \$50,000,000 in additional taxes in one month; the additional assessment is now running about \$30,000,000 per month. The hardest nuts to crack are now being reached. Both the government and the public will suffer if the decisions are not made by trained experts. God knows the interpretation by experts of the revenue acts of 1917 and 1918 is questionable enough as it is; if no relief is given the Bureau immediately the outlook for the future is appalling.

"My observation is that, while the Income Tax Unit is in a bad mess, it is at the same time a remarkably efficient organization. The figures given are significant of what could be accomplished with additional technical men and better working facilities. It is easy to appreciate that the still undetermined taxes are to issue principally from the most complex cases. The Income Tax Unit, in its distress over lack of employes and working equipment, has naturally referred first to the most easily adjusted returns. The Unit is operating today in four buildings in Washington; all but one of these are absolute fire-traps.

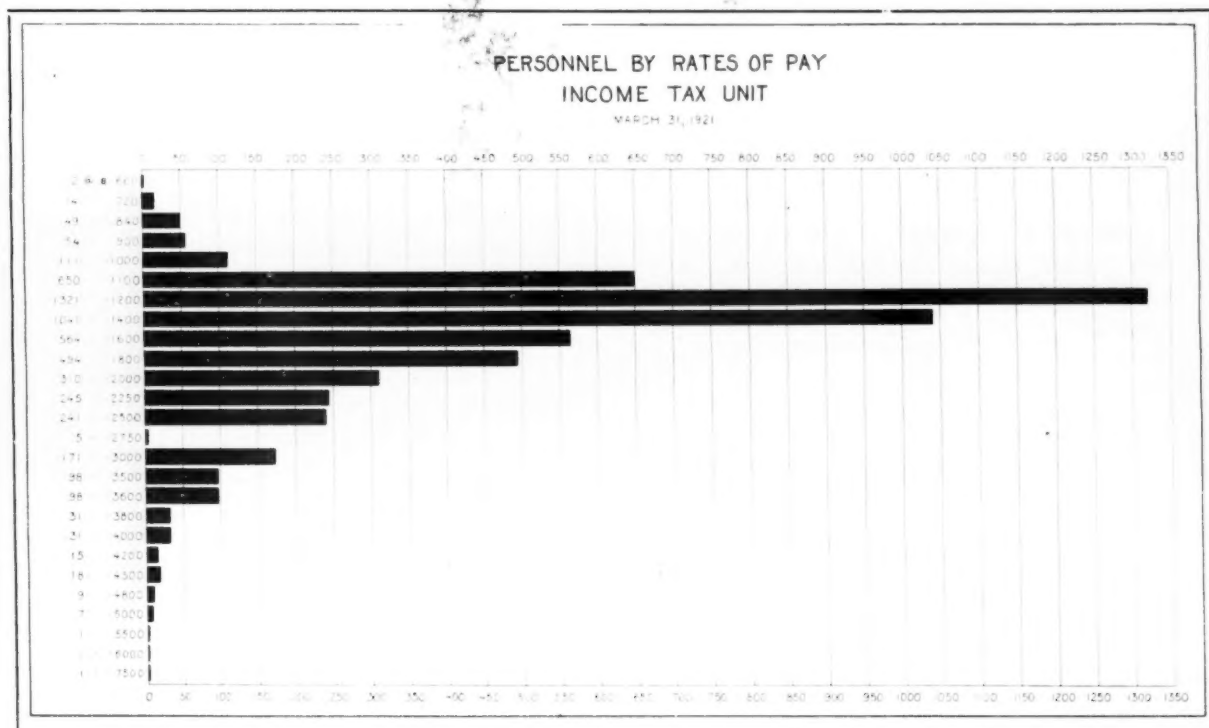
"The property loss by the San Francisco fire was about \$300,000,000. The annual loss by fire in the United States is about \$270,000,000. If a fire-brand were to set a match to that tinderbox known as Treasury Annex No. 2, the government would immediately sustain an irreparable loss of fully half a billion dollars through destruction of millions of returns and tons of important data required in the determination of taxes. Who would answer for that?

"Repealing the excess profits tax would involve a loss of revenue of about \$500,000,000 per annum. That can

be more than replaced by expedited tax collections and by immediate action to save to the government large sums that never will be realized at all if collection is further delayed. And the man who has paid his rightful tax expects that his neighbor shall be forced to do the same."

Speaking of the general sales tax, which has been the principal subject of debate during the Finance Committee hearings, Mr. Wilson expressed his personal opinion that there is no necessity for such a levy. "In any event," he declared, "the general sales tax can scarcely be honestly urged by capital. The Secretary of the Treasury has recommended the abolition of the excess profits tax upon corporations and reduction of the surtax upon incomes of the wealthy—not for sentimental reasons but for practical ones. The advocates of the general sales tax subscribe to that, and then ask that Congress remove the existing excise taxes upon the luxuries of the rich man and transpose them to the dinner pail—a tax off the diamond shirt stud and onto the bone collar button. Capital is overburdened with taxation today, overburdened to the extent that it is reacting to the disadvantage of labor through restricted industrial expansion, but capital is coming to Congress with clean hands. It is asking relief on entirely tenable grounds; it must be rid of the excess profits tax incubus; it must have more incentive for profitable activity, but its common sense does not allow it to expect billion-dollar imposts upon the absolute necessities of life.

"The real solution of the federal tax problem is lower taxes, not juggling of taxes. If the war-time rates can be made to yield all they should, and Congress has the opportunity and the power, genuine relief is in prospect. May I suggest that the beginning need not wait upon the general revenue program?"





BUILDING MATERIAL SHIPPERS SEEK AID OF PRESIDENT

Left to right, H. M. Keasby, Hollow Building Tile Association; Frederick Schwertner, attorney; Hugh Fullerton, American Mining Congress; W. M. Council, Hollow Building Tile Association; E. Guy Sutton, National Association Sand & Gravel Producers; A. P. Sandles, National Crushed Stone Association; Francis B. James, attorney; J. G. Barbour, National Paving Brick Manufacturers Association.

REDUCED FREIGHT RATES NEEDED TO START BUILDING REVIVAL

THE HOUSING SHORTAGE was brought to the personal attention of President Harding a few weeks ago by representatives of building material manufacturers, who asked his intervention in behalf of immediate railroad rate reductions. Building materials are constructed largely out of mining products, and the interview with the President was arranged by the American Mining Congress. Following this conference, numerous conferences were held during the first three weeks of May with Daniel Willard of the B. & O. and other railroad heads. These negotiations are continuing.

Those who called upon the President were: Hugh Fullerton of the American Mining Congress; E. Guy Sutton, executive secretary, National Association Sand & Gravel Producers; J. G. Barbour, chairman Traffic Committee, National Paving Brick Manufacturers; H. E. Stringer, chairman Traffic Committee, American Face Brick Association; H. M. Keasbey and W. M. Council, Hollow Building Tile Association; Frank Carnahan, National Lumber Manufacturers Association; A. P. Sandles, secretary, National Crushed Stone Association; W. D. Lindsay, Gypsum Industries Association.

These representatives of the building industries presented the following memorial to the President:

MR. PRESIDENT.

Sir:

This memorandum is presented by national organizations of manufacturers and distributors of building and road materials as follows: Lumber, brick, building tile, sand, gravel, crushed stone, lime and plaster.

BUILDING AND ROAD MAKING MATERIAL INDUSTRIES STAGNANT.—Irrespective of the fact that there is an unprecedented demand for all kinds of construction, the building and road making industries are at a standstill.

There are many factors contributing to delay in the prosecution of building work. The chief cause of deferment is the excessive freight rates applying on that class of building materials which are heavy loading and of low value, such as sand, gravel, crushed stone, brick, lumber, building tile, lime and plaster.

JUSTIFICATION FOR REDUCTION OF RATES ON BUILDING AND ROAD MAKING MATERIALS.—Freight rates on building and road making materials have been increased an average of 110 percent since 1917, as compared with 75 percent applying on general commodities. In some instances the rates on building and road making materials are now in excess of their price at the point of production.

EXPEDIENCY OF REDUCING RATES ON BUILDING AND ROAD MAKING MATERIAL.—The rates on building and road making material have been advanced beyond the point which the traffic will bear, and thus shippers of these materials are denied their former markets and the carriers are deprived of a large volume of traffic, with a consequent loss of much-needed revenue, while the public is sorely in need of homes and highways.

The railroads have a vast number of cars and locomotives standing idle which could be utilized for carrying building materials.

There is imperative necessity for the immediate stimulation of some large industry which is national in its scope, in order to provide work for the unemployed. It is submitted that no other industry lends itself to the fulfillment of this mission in the same degree as the resumption of construction work, for the demand for building material is universal. Senator Calder's Committee stating that there is a crying need for over one million homes throughout the country.

NECESSITY FOR READJUSTMENTS ANTICIPATED.—In rendering its report in Ex Parte 74, the Interstate Commerce Commission gave cognizance to the necessity of readjusting rates to meet changing conditions and to remove hardships created by the hasty consideration of the case necessitated by the emergency involved. It was recommended that such readjustments be effected between the shippers and the carriers without appeal to the Commission. However, the shippers of building materials have not been able to prevail on the carriers to make proper revisions, and hence it appears that the public authorities must be requested to intervene in some manner.

NEED FOR PROMPT ACTION.—It is well known that proceedings before the Commission are not only expensive, but entail long and unavoidable delays. On account of the fact that two months of the normal building season have already passed, and same will end early in November, there is need for immediate action. For this reason the usual course of procedure in appealing for relief through the Interstate Commerce Commission can not be contemplated. The public is demanding prompt action.

We earnestly request your advice and assistance in bringing about an expeditious handling of the matter.



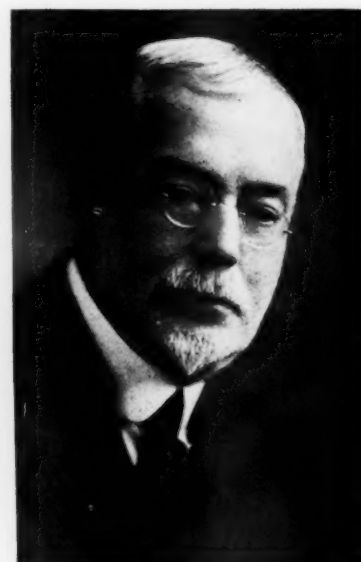
GOV. CHARLES R. MABEY

Of Utah. Governor Mabey is interested in all movements for development of the west. He plans to head a delegation to the next Mining Congress Convention.



GOV. THOMAS E. CAMPBELL

Of Arizona, who states that three-hundred thousand acres will be reclaimed and thirty-thousand horsepower developed in the Salt River Valley.



EX-GOV. WILLIAM SPRY

Of Utah, now Commissioner of the General Land Office. He was formerly chairman of the Committee on Legislation and Publicity of the Western States Reclamation Association.

THE WEST URGES WORLD'S GREATEST RECLAMATION PROGRAM

GOVERNORS of five western states called on Secretary of the Interior Fall on May 17 and President Harding two days later to urge a comprehensive program for reclamation of arid lands and to invite the government to appoint representatives on the Colorado River Interstate Commission. They were Governor Emmet D. Boyle of Nevada, Governor Louis F. Hart of Washington, Governor D. W. Davis of Idaho, Governor Thomas E. Campbell of Arizona and Governor Charles R. Mabey of Utah. A score of other officials of western states were members of the company, while ex-governor William Spry of Utah, now the commissioner of the General Land Office, and Arthur P. Davis, director of the Reclamation Service, also participated in the conference.

Governor Davis is the head of the Western States Reclamation Association. He came to Washington primarily to urge favorable consideration for the Smith-McNary bill, which provides for increased expenditures and general elaboration of the governments' whole reclamation program in the western states. He and other members of the delegation spent approximately a fortnight in Washington interviewing members of Congress and administrative officials, and before leaving expressed satisfaction with the results attained.

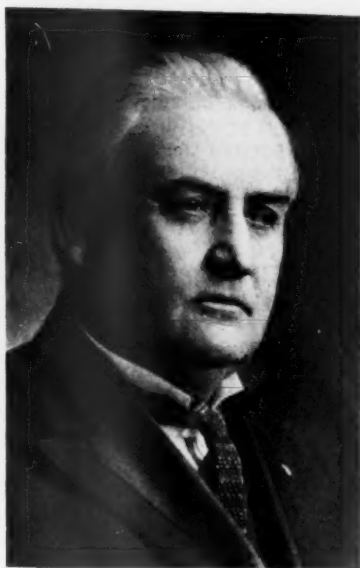
Commissioner Spry was formerly chairman of the Committee on Legislation and Publicity of the Western States Reclamation Association. The objects of the organization are the same as those of the government in respect to development of arid lands into productive areas. As explained by Governor Spry, the plan of reclamation contemplated in the Smith-McNary bill is the greatest under-

taking of its kind in the history of the world. It contemplates the conversion of approximately twenty million acres of unproductive land into a veritable garden spot and would involve a two-billion dollar turnover in twenty years. The Smith-McNary bill appropriates \$250,000,000 to be expended over a short term of years, but to be in the form of a loan. Various irrigation districts, as development progresses, are to be bonded, but for not in excess of half of their value as appraised by the Federal Farm Loan Board. Returns from the irrigation projects are to be credited to the original \$250,000,000 so that the whole will be retained as a revolving fund, and at the expiration of twenty years repayment to the government would begin. It is these transactions which, as Governor Spry said, will involve a turnover of two billion dollars in twenty years. The Smith-McNary bill involves a complete plan, and if it is passed no further legislation directed towards the reclamation of western lands will be required.

In many western states, the annual rainfall amounts to five inches or less. Twelve inches is the minimum amount which will suffice for the driest of dry farming; fifteen is better. Irrigation projects as contemplated will distribute twenty-four inches of water over the land every year, about five distributions a year being the usual method.

But successful irrigation projects include not only facilities for watering one year's crop, but a second year's crop if necessary. Hence the construction of immense reservoirs as insurance against drouth is included.

One of the largest areas involved in western reclamation plans is that through which the Colorado River flows. The Colorado River possesses almost limitless potentialities for



GOV. LOUIS F. HART

Of Washington, who believes reclamation of the arid lands of the west is at one and the same time the country's greatest opportunity and its greatest duty.



GOV. D. W. DAVIS

Of Idaho, head of the Western States Reclamation Association, who led the delegation of western state executives, which called upon President Harding.



GOV. EMMET D. BOYLE

Of Nevada. He delivered one of the principal addresses at the last convention of the American Mining Congress and is planning to attend the next one.

power and irrigation development. It discharges annually from nine to twenty-two million acre-feet of water—or an amount sufficient to cover to a depth of one foot that many acres. The governors and others of those who visited Washington believe it is possible, through proper co-operation between the states and the national government, to utilize this great volume of water so as to reclaim from three to five million acres of land, making them worth from \$200 to \$1,500 each, and at the same time to produce between one and two million horse-power of electricity.

"The Colorado River and the Colorado River Basin form the greatest undeveloped natural resource in arid America," Governor Boyle said to a representative of the Mining Congress Journal.

To avoid complications which have grown out of the use in the past of interstate streams for developmental purposes, the legislatures of each of the states through which the Colorado flows created commissions to co-operate in an effort to determine, in advance of development in the Colorado basin, the fair rights of each state affected. The members of these commissions, together, compose the Colorado River Interstate Commission.

Governors of states affected by Colorado River development, or their representatives, met in Denver May 9-11, and adopted resolutions that the rights of the various states be determined immediately and that the national government be invited to have representatives on the interstate commission. Two reasons for active participation of the federal government exist; (1) because of the facilities already possessed by the government in the Reclamation Service, and, (2) because the river is an international stream and the diversion or utilization of its waters on a large scale will naturally call for negotiations between the State Department and Mexico.

Practically every member of the Denver conference came on to Washington. It is considered certain that the

government will have representation on the Colorado River Interstate Commission, as a bill to this effect, brought to Washington by the western delegation, received the approval of President Harding and Secretary Fall and was introduced by Senator Bursum, of New Mexico.

The mining industry is deeply interested in any plan for the reclamation of arid western lands. Having heavy investments, they will naturally share in the general prosperity which is bound to result from the conversion of a twenty-million-acre wilderness into a food-producing area of equal dimensions. They will likewise be able to take advantage of the hydro-electric power which will be developed.

Governor Campbell of Arizona, who has long been deeply interested in reclamation projects, states that three-hundred thousand acres will be reclaimed and thirty-thousand horse-power developed in the Salt River Valley alone.

Governor Hart of Washington looks upon the Smith-McNary bill as one of the greatest pieces of constructive legislation ever proposed and upon reclamation as at once the country's greatest opportunity and greatest duty. "Irrigation is an absolute necessity if we are going to produce enough food to feed the American people," he said.

Continuing, Governor Hart said: "Twenty million acres in this country are arid, but if properly watered they will not only prove the most productive farm lands in the world but will open an absolutely new agricultural field and will be a great inducement to soldiers and others unemployed to take up life on the farm. The estimated cost of irrigating this land is \$100 per acre. The production question is perhaps the most important problem that America now faces, and these regions must not be allowed to remain as wasted and unused lands as in former years. With an enormous percentage of the population unemployed it is imperative that these fields be opened."

PITTMAN SILVER PURCHASE ACT WILL REMAIN IN FORCE

EVERY SILVER MINE in the United States would be closed down now except for the Pittman Act, in the opinion of Senator Key Pittman of Nevada. But the measure will not only remain on the statute books, he believes, but conceivably may operate forever.

"As long as the world market is below \$1 an ounce the government will continue to buy American silver at \$1

ceivable. But if it were possible for such an attempt to be made, and it appeared there existed a possibility of its succeeding, Senator Pittman said he and three other western Senators would talk it to death.

"I know of four Senators, including myself, who will speak six hours each day for a year, if necessary," he said. "It is within our power to prevent the repeal of the Pittman Act by talking, and if necessary we will talk."

SALT LAKE BANKERS OPPOSE REPEAL OF PITTMAN ACT

FOLLOWING an address delivered by W. Mont Ferry, managing director of the Silver King Coalition Mines Company, the Salt Lake Clearing House Association recently adopted resolutions strongly opposing repeal of the Pittman Act. Mr. Ferry was the author of the resolution.

Mr. Ferry in his address explained that silver purchases under the Pittman law amount merely to a restoration to the treasury of bullion which was removed for war purposes, and that the government is not losing anything. He likewise showed that silver producers were not making any profit, to speak of, out of the transaction, since the government by laying an embargo during the war prevented them from taking advantage of market prices by exporting the metal. The government at that time, and before agreement in behalf of the Pittman law was entered into, made a solemn promise to buy silver at \$1 an ounce from domestic producers until the entire 208,000,000 ounces purchased by England was replaced.

SAFETY AND HEALTH CAMPAIGN IN UTAH MINING CAMPS

CARELESSNESS on the part of employees resulted in such a large number of accidents, especially fatalities, that the Utah Industrial Commission recently called in the United States Bureau of Mines to co-operate in conducting a safety and health campaign. The state commission found that approximately 40 percent of accidental deaths was due to carelessness, as against only 10 or 12 percent which could be charged to faulty conditions in the mines.

A mine rescue car was sent on a tour of the mining districts, two weeks being allotted to each camp, where meetings were held and training classes conducted. The principal channels through which educational work was carried on were safety and health rallies, foremen's meetings and the pledging of safety and health scouts. Results obtained at the first seven camps included 1,219 pledges of safety and health scouts, attendance of 1,790 at safety rallies, attendance of 170 at foremen's rallies, 376 trained in first aid and 42 trained fully in mine rescue work. The campaign continues.

SILVER PURCHASES.—The Treasury Department on May 4 had purchased under the Pittman Law 50,231,197 ounces of silver and coined 6,736,000 dollars. April coinage consisted of 4,370,000 dollars, 1,977,000 nickels and 2,424,000 one-cent pieces. During the same month 6,225,000 nickel pieces were coined for Colombia.



SENATOR KEY PITTMAN

an ounce," Senator Pittman said to a MINING CONGRESS JOURNAL representative. "It would take about three and one-half years to replace the 208,000,000 ounces of silver involved in European purchases, but when European countries begin to produce again the price of silver will rise above \$1 an ounce and American silver will be sold on the open market. It is therefore possible that the government fund for the purchase of silver at this figure may never become exhausted."

It is Senator Pittman's belief that such agitation for repeal of the act as has been observed was instigated by foreign financiers and that it will accomplish nothing. For Congress to repeal the measure he holds would be an act of dishonor, in view of the agreement entered into by representatives of producers before the law was introduced, and such action on the part of Congress is incon-

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MELLON TO DETERMINE FATE OF GOLD MINING INDUSTRY

PRIOR to the advent of the new administration the Treasury Department repeatedly expressed opposition to the bill introduced by Congressman Louis T. McFadden, Chairman of the Banking and Currency Committee of the House of Representatives, to equitably adjust the cost-and-price equation between the producer of new gold and the industrial consumer of gold. The report of the Special Gold Committee of the Treasury Department under Secretary McAdoo and statements by Secretary Houston all referred to the rapid return to normal economic conditions, in which event the gold mining industry would return to normal, and that therefore there was no need for temporary relief. These were poor prophecies, of which the actual conditions through which we have passed are proof. The output of gold has

nate the act on three months' notice in event of a more rapid return to normal conditions than that contemplated in the bill. These changes beyond any question of doubt fully protect the government's interests from any change in the economic conditions, and successfully dispose of arguments advanced by those who are of the opinion that we are to return to normal conditions in the immediate future.

In a matter which so greatly involves the Treasury Department both as to policy and administration, Congress would not be justified in enacting this legislation unless it met with the unqualified approval of the Secretary of the Treasury. Chairman Fordney of the Ways and Means Committee, realizing this fact, referred the bill to Secretary Mellon for an opinion, and his reply is awaited by the committee and the public. The following letter was sent by Mr. J. F. Callbreath, Secretary of The American Mining Congress, to the Hon. Andrew W. Mellon, Secretary of the Treasury, to inform him of the serious condition of the industry and the importance of his reply to Chairman Joseph Fordney of the Ways and Means Committee, upon which rests the fate of the bill, the fate of the gold mining industry, and the preservation of the developed gold ore resources of the nation.

May 16, 1921.

Hon. Andrew W. Mellon,
Secretary of the Treasury,
Washington, D. C.

My dear Secretary Mellon:

Will you permit me to present briefly to you a statement of present conditions concerning the McFadden Bill, H. R. 5025, in order that your reply to the inquiry of the Ways and Means Committee of the House of Representatives may be made with full appreciation of its significance.

It is not necessary to discuss the great importance of the maintenance of the gold standard, or the dangers involved if the gold reserve of the world is not sufficient to maintain public confidence in the ultimate redemption of whatever volume of paper money is based thereon. The credits of the world have been increased out of all proportion to the increase in the world's gold reserve.

In the United States the production of gold declined from \$101,000,000 in 1915 to \$49,500,000 in 1920. This decline will be accelerated if it shall be determined that no aid is to be given to the gold mining industry, because many mines will close if operators are now told that their difficulties must adjust themselves as deflation progresses and commodity prices return toward normal. The closing of these mines means the permanent loss of a large part of the American developed gold ore resources and the capital invested therein.

The costs of gold production have not decreased within the last year, because any decreases in the costs of supplies and labor have been more than offset by a 35 percent increase in freight rates, a 10 percent increase in the cost of powder, and radical advances in the cost of power.

The American Mining Congress represents the mining industry as a whole, less than 10 percent of its members being directly connected with the gold producing industry. It has endorsed provisions of the McFadden Bill because these seemed to offer an equitable solution of a difficult problem, not only to make possible that the gold mining industry be maintained, but also that those agencies which transform gold from a basis of currency into luxuries be forced to pay the actual cost of producing their raw material. We have believed that increasing the gold reserve tends to the maintenance of the nation's business and the obligations which naturally belong to a creditor nation to extend foreign credits necessary to keep its industrial machinery in operation.

It has been intimated that the American Bankers Association is opposed to the enactment of the McFadden Bill. We attach

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CONGRESSMAN LOUIS T. McFADDEN

continued to decline, from \$101,000,000 in 1915 to \$49,500,000 in 1920, because of increased costs of production.

Congressman McFadden introduced in the new Congress H. R. 5025, which contains amendments lessening the time period in the bill which he introduced in the previous Congress, from five to three years, and granting full authority to the Secretary of the Treasury to termi-

hereto a statement giving, as we understand it, the history of the American Bankers Association's connection with this question, and from this record we believe that the Association as a whole favors temporary governmental aid to the gold producing industry. If the McFadden Bill is not the proper measure, it would seem incumbent on those who oppose it to suggest some constructive measure to bring about the results approved in the resolutions adopted by the Chicago and St. Louis Conventions of the American Bankers Association.

The American gold mining industry faces destruction to an extent involving the national welfare unless prompt governmental relief is provided. We are advised that your position for or against the McFadden Bill to be indicated in your reply to Chairman Fordney, will in effect determine its fate.

Very truly yours,

THE AMERICAN MINING CONGRESS,

(Signed) J. F. CALLBREATH,
Secretary.

The American Bankers Association at its Forty-fourth Annual Convention held in Chicago on September 27, 1918, adopted unanimously the following resolution:

"WHEREAS, The gold production of the world is rapidly decreasing and

"WHEREAS, The only form of relief that will prove effective and can be applied promptly, is action by the United States Government in such form and by such methods as may be deemed fit and proper under the circumstances, and

"WHEREAS, Gold is the standard of value and the basis of all credit, and it is vitally important to the financial and commercial life of the nation and of the world; now, therefore, be it

"Resolved, That the American Bankers Association in convention assembled, respectfully request and urge upon the government of the United States the desirability of maintaining the production of gold to at least its pre-war volume, and ask that steps be taken immediately to that end; and be it further

"Resolved, That the secretary of this Association be, and he hereby is instructed to send a copy of this resolution to the President of the United States, Secretary of the Treasury, and Secretary of the Interior, advising them of its adoption; and be it also further

"Resolved, That considering the great importance of this subject, this convention recommends to the Executive Council that the matter be referred to the Federal Legislative Committee and the Currency Commission for an exhaustive study and such action as may be deemed necessary."

At the Forty-fifth Annual Convention of the American Bankers Association the following resolution was adopted unanimously on October 2, 1919, at St. Louis:

"WHEREAS, The gold production of the United States, which declined so rapidly during the war period, has since the signing of the armistice still further declined because of the extreme economic pressure to which the gold mining industry has been subjected, and

"WHEREAS, Gold is the standard of value and the basis of all credit, and it is vitally important to the financial and commercial life of the nation that the monetary reserve be protected, now, therefore, be it

"Resolved, That the American Bankers Association, in convention assembled, respectfully requests and urges upon the Government of the United States the desirability of maintaining the domestic production of new gold in sufficient volume to satisfy the present anticipated trade requirements for this metal, and asks that steps be taken immediately to that end, and be it further

"Resolved, That the secretary of this association be, and hereby is, instructed to send a copy of this resolution to the President of the United States, the Secretary of the Treasury, and the members of the Senate and the House of Representatives of the United States, advising them of its adoption, and be it also further

"Resolved, That, considering the great importance of this subject, this convention recommends to the Executive Council that the

matter be referred to the Federal Legislative Committee and the Currency Committee for an exhaustive study and such action as may be deemed necessary."

In response to these resolutions Representative Louis T. McFadden, chairman of the sub-committee of the Banking and Currency Committee of the House of Representatives, introduced H. R. 13201 on March 25, 1920.

At the Executive Council meeting of the American Bankers Association held in Pinehurst April 28, 1920, notwithstanding that both the Federal Legislative Committee and the Trust Company Section of that organization were prepared to favorably report upon the bill, it was referred to a committee of three for further investigation. An unfavorable report was recommended by this committee of three, which was presented to the Forty-sixth Annual Convention of the American Bankers Association by Mr. Lawrence E. Sands, a member of the committee, at the meeting held in Washington October 18, 1920. Following the reading of the report Mr. McFadden made a reply, whereupon a motion was adopted to refer both the report and the reply thereto to the Economic Policies Commission for further investigation and action.

At the recent meeting of the Executive Council held May 2-6, 1921, at Pinehurst, North Carolina, the Economic Policies Commission did not endorse the adverse report.

CONGRESSMAN McFADDEN EXPLAINS NEW GOLD BILL

REPRESENTATIVE Louis T. McFadden, chairman of the Banking and Currency Committee of the House of Representatives, who introduced H. R. 5025, a bill to conserve the gold ore resources of the nation, has given out an interview in support of the measure. The measure will be known as the McFadden Bill, as was its predecessor which failed of enactment at the last session.

"The bill provides revenue," said Mr. McFadden, "from an excise of 50 cents per pennyweight of fine gold contained in manufactured articles, to be collected at the time of sale, and for a premium of 50 cents per pennyweight to be paid to the producers of newly mined gold in the United States and its possessions. The government is fully protected under the provisions of the bill from the presentation of other than newly mined gold to receive the premium. The bill differs from H. R. 13201 introduced by me in the last Congress, in that the period has been lessened from five to three years, and that the Secretary of the Treasury is granted full authority to terminate entirely the provisions of the act on three months notice in the event of a return to normal economic conditions prior to the expiration of the same. Exporters of articles containing gold have been exempted, as they were from the payment of the luxury tax, in order not to interfere with foreign competition. Revenue will be derived on all gold articles of foreign manufacture sold in this country."

Mr. McFadden emphasized that "The industrial consumers of gold have been and are receiving gold at the pre-war price. They will continue to receive bullion from the mint at the monetary price of \$20.67 per ounce, but through the payment of the excise when the manufactured article is sold they will be paying more nearly the production cost of gold and thereby lessen the subsidy which in effect they now enjoy. The premium to the produce for new gold is a compensation for the increased cost of pro-

duction and cannot be construed as a subsidy. The bill provides an equitable adjustment between the producer and the industrial consumer of gold."

In reviewing the history of this legislation Mr. McFadden stated that "Extensive hearings were conducted in the last Congress on this bill, and it was reported favorably by the sub-committee of the Ways and Means Committee before adjournment. Increases in freight and power rates have more than offset any declines in wages and materials consumed in gold mining. Because of the emergency confronting the gold mining industry, the enactment of this bill should be expedited."

HELENA COMMERCIAL CLUB GETS BEHIND McFADDEN BILL

MEMBERS OF CONGRESS during the last fortnight have received from the Commercial Club of Helena, Mont., a strong letter urging support of the McFadden Bill. It was prepared by the Mining Committee of the Club. Copies were also sent to western chambers of commerce. The arguments advanced are considered convincing. The letter follows:

"Gold is the basis of American finance.

"In 1915, gold to the value of \$101,000,000 was produced in the United States.

"In 1920, the production was \$49,500,000.

"In 1921, the output will be less than \$40,000,000.

"The gold industry in the United States is dying fast.

"At the present price for gold, few, if any, gold properties can afford to operate in this country.

"All the gold mines in Montana are either shut down or are losing money so rapidly that they must soon close.

"If the United States wants United States gold, the McFadden bill must be passed.

"Gold is the only commodity that has not increased in price, and yet the mining of gold now costs 85 percent more than in 1914. Among the principal factors entering into gold production are the following:

	Prices in 1914	Prices in 1921		Prices in 1914	Prices in 1921
Powder.....	12.50	28.50	Flour.....	3.75	5.25
Cups.....	.85	2.50	Baron.....	.20	.37
Fuse.....	.75	1.35	Canned corn.....	.10	.15
Shovels.....	1.00	2.00	Canned tomatoes.....	.12	.15
Picks.....	1.00	1.75	Canned Beans.....	.15	.20
Steel Rails.....	3.00	5.25	Labor.....	3.50	5.00

"Freight on raw ore has increased 50 percent; on finished product the increase has been 120 percent.

"In 1919, the United States mint sold for consumption in manufactures and the arts, gold to the value of \$76,837,600. Your American mines cannot produce enough gold for these industries nor can they produce enough gold for the Treasury Department for sale at the present standard of \$20.67.

"The United States government fixes the price at which gold can be sold. The present price will strangle the gold industry to death. The only hope for American gold today is the McFadden bill.

"We ask your support and vote for the measure because it means life or death to our gold industry.

"The west can pay America's war debt if you give the gold industry a fighting chance. The wealth is in the ground. Give us a chance to take it out."

INTERIM TARIFF PROTECTION PROVIDED BY LONGWORTH RESOLUTION

REPRESENTATIVE Nicholas Longworth of Ohio has introduced a resolution to settle the question as to when the provisions of new tariff legislation shall become effective. It is designed to give interim protection during the time between the passage of a tariff bill and the date of effectiveness as provided therein.

The Longworth resolution provides that immediately upon the introduction in the House of the proposed general tariff revision, all duties therein levied shall become effective at once pending final passage and approval by the President; that wherever the duty finally levied shall be lower than that which was at first proposed the difference in tariffs collected shall be refunded to the importer; that wherever the rate finally adopted is higher than that first proposed there shall be no further collection of duty.

The Longworth resolution is an emergency measure designed to prevent excessive dumping of foreign material after the proposed new rates of duty become known and before they become effective. It is considered practically certain that this resolution or some similar one will be passed by Congress.

ROLLA EXPERIMENT STATION COMPLETES FLUORSAPAR INVESTIGATION

THE FIRST completed investigation made by the Rolla experiment station of the Bureau of Mines was reported within the last month. It related to the treatment of fluorspar, and results are regarded by Dr. H. Foster Bain, director of the Bureau, as very important.

Fluorspar abounds in southern Illinois and western Kentucky. It contains small quantities of lead and zinc and larger quantities of calcite and silver. In the past the material has been subjected to the ordinary wet concentration process, which made it possible to take out the lead. It was noticed that there was left a fine middling which included calcite, and the problem before the Rolla station was in regard to the treatment of this material.

Flotation and other methods were studied. One investigator noticed that parts of the material adhered to the bottom of an enameled white pan and wondered why. Static electricity came to his mind. So he procured a static machine and made some tests, and found that by an electrostatic process there could be produced from the low-grade material which is abundant an extremely high-grade fluorspar product, one for making hydro-fluoric acid and for other chemical work.

A technical report of the work has been placed before the mining companies involved and engineers engaged in turning out commercial fluorspar products. The country's fluorspar products in 1919 were worth \$3,102,000, of which \$2,900,000 worth came from the Kentucky-Illinois field. The value of last year's output was much higher.

GOODING ON TARIFF.—The mines can prosper without protective tariff, providing they can get cheap labor—but who wants to see labor poorly paid? Senator Gooding, of Idaho, does not. In an address to the Senate May 10 he said: "Give the manufacturers, the farmers, the miners of this country labor as cheap as it is in foreign countries and they will not need any protection, for they will be able to compete with the whole world. But few, if any, of our industries can exist long without protection if the American scale of labor is to be maintained. I am unable to understand the man who would be willing to see labor in this country forced to accept the measly pittance that is paid to labor in the Old World."

MINING CONGRESS INTERVENES IN PERCOLATING WATERS SUIT

AT THE REQUEST of the Utah Chapter, the American Mining Congress joined with the petitioner in the case of the Snake Creek Mining and Tunnel Company against the Midway Irrigation Company in a petition to the United States Supreme Court for a writ of certiorari to bring the case up from the United States Circuit Court of Appeals for the Eighth Circuit.

The Snake Creek Mining and Tunnel Company drove a tunnel a distance of 14,500 feet. At various points in the progress of the tunnel, water-flow was encountered, until, at the trial before the district court, 6,454 gallons of water had developed. The issue is whether the tunnel company developing this water owns the water or whether it belongs to the irrigation company which had appropriated the flow from a water-shed known as Snake Creek, from which this tunnel is driven.

The circuit court decided in favor of the Tunnel Company. The circuit court of appeals reversed the decision. Because the issue involved is of interest to the entire mining industry, the American Mining Congress joined with the mining company in asking the Supreme Court to rehear the case. The issue is of public interest because if it is true that this water belongs to the irrigation company it would be possible for irrigation companies to enjoin the driving of tunnels by mining companies anywhere because of the probability that such a tunnel might divert water from their use or from one water-shed to another.

The petition filed by the American Mining Congress through Secretary J. F. Callbreath, as a friend of the court, is as follows:

MOTION

"Comes now J. F. Callbreath, and showing to the court that he appears herein as counsel for the American Mining Congress, a corporation organized for the purpose of promoting the welfare of those engaged in the mining industry, states that the decision of the Circuit Court of Appeals in this case affects the interest generally of persons and corporations engaged in such industry in all sections of the country where water is used for irrigation purposes; that said decision is a radical departure from the rule of decision which has hitherto prevailed with reference to the ownership of percolating waters encountered and developed as an incident to certain mining operations.

"Wherefore said J. F. Callbreath hereby moves the court for leave to submit as amicus curiae the following suggestions in support of the petition for a writ of certiorari herein.

J. F. CALLBREATH,
As Amicus Curiae."

SUGGESTIONS

Concerning the Importance to the Mining Industry of the Decision of the Circuit Court of Appeals Herein

"The American Mining Congress is a non-profit corporation organized to promote the welfare and to advance the interests of individuals and corporations engaged in the various branches of the mining industry throughout the United States. It has no pecuniary interests whatever in this litigation and is only interested in the questions decided by the Circuit Court of Appeals and in the consequences of such decision as they affect the mining industry.

"The facts of the case being fully and accurately stated in petitioner's brief, it is believed to be unnecessary to repeat them here or to make any further reference to them other than to say that the waters in question were conclusively shown to be percolating waters encountered and developed by petitioner by means of a tunnel driven by it into a mountain in the State of Utah, in the vicinity of which mountain flowed a surface stream whose waters had been

appropriated for beneficial purposes by the respondent Midway Irrigation Company.

"The District Court decreed that the petitioner was the owner of the waters so developed by it, but this decree was by the Circuit Court of Appeals reversed, and the right to the usufruct of said waters was awarded to said respondent.

"At the time said percolating waters were collected by means of petitioner's tunnel the statutory law of the State of Utah provided, and the decisions of the court of last resort of said State uniformly held, that percolating waters developed by means of a tunnel became the property of the owner of the tunnel in accordance with the rule at common law.

The Great Public Importance of the Questions Involved

"The necessary result of the decision of the Circuit Court of Appeals is to affirm the contention that the appropriators of the waters of a certain stream acquire an easement in the lands through which these waters percolate before they reach the surface and that such appropriators have the right to insist that such percolating waters may not be intercepted in such manner as to divert them from the surface stream. It is submitted that such ruling, if generally adopted, would very greatly injure the mining industry and retard, if not prevent, mining development in certain sections of the country. See *Crescent Mining Company v. Silver King Mining Company*, 17 Utah, 444, at page 452.

"The waters secured as an incident to the construction of tunnel and other underground excavations in connection with mining operations are often of great value and constitute an important item in estimating the feasibility of such improvements. For instance, in the instant case the waters in controversy are valued at more than \$40,000. Furthermore, it frequently happens that mining operations cannot be carried on at all until the mines or mining properties are drained. It also frequently happens that percolating waters when collected and conveyed to the surface in these mining operations cannot be delivered into the streams of which they are conceived to be the source of supply.

"Under the rule adopted by the Circuit Court of Appeals this character of diversion of underground percolating waters would constitute an invasion of the rights of such appropriators of the waters of the surface streams which ordinarily would be attended with such irreparable consequences as to entitle the injured party to an injunction. The inevitable result of this would be to put a stop to the mining operations concerned.

"In this connection I desire to adopt and respectfully urge the points discussed at pages 51 to 63, both inclusive, of petitioner's brief.

"Respectfully submitted,

J. F. CALLBREATH,
As Amicus Curiae."

TRI-STATE CHAPTER CONTINUES GIVING AID TO UNEMPLOYED

AT THE LAST MEETING of the Tri-State Chapter of the American Mining Congress, held at Picher, Oklahoma, the giving of relief to unemployed mine workmen was again the main subject of discussion. Secretary Richard Jenkins made a report showing that \$2,386 had been paid to men who were given employment in road work. The men are paid in food certificates.

At the time of the meeting four men with teams and five without teams were being employed in the vicinity of Hockerville and five men with teams and six without teams were employed at Picher. These men were given work in the construction of a building for the Chanute Spelter Company.

Appointment of a committee to make arrangements, if possible, for construction of a highway from Picher to Zineville was authorized. The road work will provide employment for a large number of men.

BULKELEY WELLS HEADS COLORADO METAL MINING BOARD

COLORADO METAL MINERS are now taxing themselves to "create a fund for the benefit of the metal mining industry." The money, variously estimated at from \$15,000 to \$20,000 a year, will be expended by a Metal Mining Board which has been appointed by the governor and which has already organized and begun its work.

The law authorizing collection of a tax of one-tenth of one percent upon all metal mining property and creating the board, passed by the recent legislature, had the backing of the Colorado Chapter of the American Mining Congress and the Colorado Metal Mining Association, which include ninety percent of the state's operators.

The governor appointed the following board: Bulkeley Wells, manager of the Smuggler Union; George M. Taylor, manager of the Portland Gold Mining Company at Cripple Creek; Fred Carroll, manager of the Atlas Gold Mining Company at Ouray; R. N. Henderson of Breckinridge, manager of the Wellington Mines Company; William Loach, manager of the Wolf Tongue Mining Company at Boulder; Jesse F. McDonald, manager of the Down Town Mines Company, Leadville; Charles Anderson, manager of the Smuggler Leasing Company, Aspen; E. L. Young, manager of the Sunnyside Mining and Milling Company, Eureka, and Charles Chase of Denver, manager of the Liberty Bell at Telluride.

The board elected as chairman Bulkeley Wells, ex-president of the American Mining Congress, and as secretary M. B. Tomblin, secretary of the Colorado Chapter of the American Mining Congress. The board decided that its committees should consist of three members each, one member to be a member of the board, who would be chairman, and the other two members to be appointed by him from among the non-member operators. Fred Carroll was made chairman of legislation; R. M. Henderson of transportation. Charles Chase of treatment of ores and concentrates, William Loach of materials and supplies, and Bulkeley Wells of power service. Mr. Henderson announced the completion of his committee by the appointment of George E. Collins, governor of the Colorado Chapter of the American Mining Congress, and George A. Stahl, of the Vindicator Consolidated Coal Mining Company.

President Taylor, of the Colorado Metal Mining Association, announced that in so far as possible the association's committees would have the same membership as committees of the Metal Mining Board.

The success of the Colorado Stock Growers' Association, functioning through the State Stock Inspection Board and supported by a tax of one-fifteenth of a mill upon all taxable property in the state, is accredited with having suggested to the operators the wisdom of the law creating the Metal Mining Board and levying a tax on metal mining property.

The members of the Metal Mining Board will work without compensation of any kind. The board is authorized to make "such investigations regarding the prospecting for, mining, production, transportation, buying, selling, treatment or reduction of metaliferous ores, as well as economic conditions relating thereto, and to make such investigations concerning the industry as they shall deem expedient or necessary." The board is given access to the files and records of all state and county departments.

The operations of the board will in no way conflict with the duties or functions of the Colorado Bureau of Mines or duplicate the work of any other state department. On the other hand, the board will co-operate with all other departments in all matters affecting the metal mining

industry. Its activities will be confined to economic problems affecting the industry; present state agencies are concerned only with physical or operating problems.

Those who advocated creation of the Metal Mining Board urged the point that the rehabilitation of the metal mining industry, which formerly maintained the highest rank in Colorado, involved problems of freight rate adjustments both intrastate and interstate, smelter or reduction charges, equitable mine taxation laws and other questions demanding investigations beyond the means or the power of individuals and voluntary organizations. The board will not supplant any existing agency, but will function with state and county organizations to broaden and extend the work now carried on by voluntary effort.

Committees of the board were instructed to plan their work immediately and report at the next meeting. Meetings will be held quarterly, or oftener at the call of the chairman.

MINING EXPOSITION CARRIES APPEAL TO NORTHWEST OPERATORS

UNSTINTED CO-OPERATION is being vouchsafed the American Mining Congress by the Northwest. The International Mining Convention, meeting in Portland, Oregon, adopted resolutions endorsing the forthcoming National Exposition of Mines and Mining and calling upon the Northwestern States and British Columbia to participate, and also passed a resolution approving the stand taken by the Mining Congress in the Minerals Separation case. Delegates from Washington, Idaho, Montana, Utah, Nevada, California, and Oregon participated in the meeting.

Only a short while before the Portland meeting, resolutions of like intent were adopted at Spokane.

The resolutions adopted by the International Mining Convention follow:

American Mining Congress

WHEREAS, it is important to the mining industry that public confidence in mining be re-established through organized educational propaganda; and

WHEREAS, a widespread and exact understanding of the importance, hazards and methods of mining should act as a deterrent upon restrictive or destructive legislation as affecting the industry.

NOW, THEREFORE, BE IT RESOLVED, that the plans of the American Mining Congress for a national exposition of mines and mining equipment, to be held in Chicago, Illinois, October 17th to 22nd, 1921, are hereby endorsed and the Northwestern States and Provinces of British Columbia are urged to participate in said exposition and to contribute to its success.

Approving Mining Congress Stand on Minerals Separation

WHEREAS, the Federal Trade Commission is maintaining proceedings against the Minerals Separation, North American Corporation; and

WHEREAS, The American Mining Congress has lent its assistance in developing and presenting evidence in connection with this proceeding;

NOW, THEREFORE, BE IT RESOLVED, by the Third Annual International Mining Convention, assembled at Portland, Oregon, April 5-9, 1921, with delegate present from all northwestern states, California and British Columbia.

That it hereby commends the proceeding of the Federal Trade Commission against the Minerals Separation, North American Corporation, and indorses and approves the action of the American Mining Congress in supporting the commission's proceeding; and

BE IT FURTHER RESOLVED, That mining men of the Northwest generally pledge assistance to the officers of the American Mining Congress in their efforts to remove what constitutes a serious and lasting menace to the mining industry.

LOOK TO FALL FOR JUST AWARDS IN WAR MINERALS CASES

CONFIDENCE IN SECRETARY FALL was expressed by the American Mining Congress, as the representative of war minerals claimants, in a formal communication sent during the last month. For the purpose of keeping the record clear, the Mining Congress notified the Secretary that several hundred claimants were dissatisfied with the awards approved by his predecessor and that they still adhered to their intention of seeking the right of rehearing upon appeal.

It has now been almost a year since the Mining Congress and scores of claimants appeared before Secretary Payne and made vigorous objection to the action of one of the members of the War Minerals Commission in personally interviewing Congressmen and working against the passage of any war minerals appeals legislation. Secretary Payne at that time said he would inform Congress that he himself was not opposed to such legislation. Nevertheless, opposition to legislation granting appeals continued to emanate from the commission.

In the communication to Secretary Fall, the Mining Congress entered a vigorous denial of Secretary Payne's assertion that of the 776 claimants whose claims were denied by the War Minerals Commission 546 acquiesced in the rejection. "If acquiescence means a silent submission to the ruling of the Secretary of the Interior which the law declares must be final, then the claimants may be said to have acquiesced," the communication read. "Acquiescence, however, involves a voluntary, willing admission and is not applicable to the regrettable position in which claimants found themselves, without appeal."

In a letter sent to the Mining Congress just prior to March 4, Secretary Payne spoke of the dissatisfied war minerals claimants as "a few" and referred to their efforts for the right of appeal as a "clamor." In the final paragraphs of the letter to Secretary Fall, the Mining Congress touched upon this phase, as follows:

"For your predecessor's letter to speak disparagingly of the 'clamor of the few dissatisfied claimants' is to treat with a lack of requisite dignity the right of every American citizen in the preservation of his constitutional rights. The clamor of one justly dissatisfied claimant should receive just as earnest, sincere consideration as the clamor of a multitude.

"It is the earnest and sincere hope of this organization that the true purpose of the War Minerals Relief Act as passed by Congress can be ultimately administered by your department and the rights of these citizens who are and have been dependent upon the good faith of the government in carrying out its recognized obligations may be sustained and the good faith of the government thereby vindicated, and for the achievement of this purpose our entire confidence is reposed in you."

The members of the House Committee on Mines and Mining are in favor of legislation giving war minerals claimants the right of appeal. All data bearing upon the question has been kept before them by the American Mining Congress.

TRI-STATE CHAPTER BEGINS NEW ZINC INVESTIGATIONS

H H. THORNBERRY, research metallurgist of the School of Mines at Rolla, Mo., has been assigned to research in the Joplin district. He spoke at the May 13 meeting of the Tri-State Chapter of the American Mining Congress, and received numerous requests for co-operation in solving milling, extraction and flotation problems.

The services of an additional representative of the Missouri Bureau of Mines and of representatives of the Geological Survey and the United States Bureau of Mines have also been placed at the disposal of the Joplin operators.

Many members of the Tri-State Chapter attended the American Zinc Institute meeting in St. Louis during the second week in May. About two-thirds of all in attendance came from the Joplin district, and relief for zinc interests was the main topic for discussion. The institute adopted unanimously the following resolution introduced by H. T. Hornsby of Joplin:

"WHEREAS, the United States treasury department is to make a new coin, 2½ cent piece with a portrait of Roosevelt upon it, and

"WHEREAS, zinc properly alloyed has been used advantageously in the other countries, notably in France, Britain and in Germany, therefore,

"BE IT RESOLVED, that the secretary of the American Zinc Institute be, and hereby is instructed to request the secretary of the United States treasury to make use of zinc in the coinage of this new piece, on the grounds of economy, efficiency and the encouragement it will extend to a key industry of this country."

On account of the condition of the zinc market, the Tri-State Chapter is meeting twice monthly.

SIDNEY NORMAN ASKS PROTECTION FOR SMALL PROMOTER

NO EFFORT HAS BEEN MADE to protect small promoters, who are indispensable side-partners of prospectors during the era of paternalism which has swept over the United States, is the opinion of Sidney Norman, editor of *Northwest Mining Truth*. Mr. Norman, at the Third International Mine Convention held in Portland, delivered a very interesting address on the subject of protection for the promoter.

Mr. Norman said "blue-sky" laws in thirty odd states of the Union had so circumscribed legitimate efforts that the greater number of the "unconquerable optimists who in past days brought the opportunities of the west to public attention" had given up the fight and migrated to other fields of effort. He spoke, in part, as follows:

"It is inconceivable that any western state anxious to develop its mineral resources should so circumscribe the efforts of honest men, in protection of fools who could not be protected outside the four walls of an insane asylum, as to make the business of promotion in a small way impossible.

"The spirit of venture, which was built in the west, must be preserved if we are to enjoy the prosperity of earlier days. Elimination of the hope of big reward, 'blue-sky,' if you will, has limited the spirit that prompts the small investor to put his luck to the touch. Big corporations have never engaged in initial development work of prospects and probably never will. That must always be left to the contributions of the many, collected by the initiative, optimism and energy of the small promoter, spurred on by the hope of reward."

The speaker believed this to be one of the big questions confronting the mining industry and asked that deep consideration be given to formulation of some national plan by which the small promoter could be restored to former activity. He suggested that supervision of mining and oil corporations seeking capital by public sale of stock be placed in charge of the U. S. Bureau of Mines under some plan by which the promoter, after establishing his bona fides with the bureau, could automatically gain the right to seek capital in any state of the Union.

PETROLEUM PROSPECTS IN SOUTH AND CENTRAL AMERICA

SHORTAGE of world petroleum supplies, apparent and prospective, together with recent discoveries in South and Central America, has stimulated American interest in the fields of the southern hemisphere. Judge J. W. Thompson, law examiner of the Bureau of Mines, during the month of May contributed materially to an accurate understanding of the situation there in an official treatise on "Petroleum Production in South America in Relation to Recent Petroleum Legislation."

• While it is true that restrictive laws serve as obstacles in the path of American development in some countries, and that in others British companies have secured a lead on those of other nations, yet it is equally true that the opportunity before American capital is great and that in some instances this opportunity has already been seized.

Argentina now has four distinct petroleum zones, the most important of which is in the territory of Neuquen, where work which began last year has resulted in the development of four wells with an estimated production of one million barrels. The Argentine government is disposed to grant to private interests the right of participation in oil developments, and British and American interests are both active.

Bolivia's geologic structures are being studied by American investigators. Large acreages of land have been conceded without any guarantee of development. The executive has the right to contract for exploitation of petroleum. The concessionaires include American, British and local companies.

Brazil's estimated producing capacity in ten years is 600,000,000 barrels. The new mining code of January, 1921, contains no specific provisions as to petroleum, but it mentions "combustibles, fossils, gems and other substances of important industrial value." Residents or foreigners in Brazil or any corporation may operate under the law through a license. Petroleum wells on government land are the property of the government and those on private land belong to the land owner, but both federal and state governments can appropriate privately owned wells if public necessity justifies.

British Guiana's laws specify that none but British subjects can secure concessions for mineral oil rights.

Chile possessed no known petroleum deposits up to October, 1919. It was reported that an English engineer was negotiating in January, 1921, for the purchase of lands in Longuimay, where indications of petroleum were discovered. The state owns sub-surface substances, though the surface is privately owned. All persons may prospect and open lands, either publicly or privately owned, but under a license granted by the land owner, or on his refusal by a judge of proper jurisdiction.

Colombia has been known to possess petroleum fields for more than one hundred years, but development has been practically prevented by the government's desire to control the oil resources and prevent them from passing to foreigners. Oil rights are reserved as the property of the government, and in 1910 a law was passed forbidding concessions to foreigners. However, when the first well was brought in on the Magdalena River in 1918, the policy of giving concessions began, a large number having since been issued to various interests. Recently certain Colombian interests have endeavored to induce French capitalists and companies to undertake oil development, and it is reported that high functionaries of France have arranged to send a commission to Colombia to make a thorough investigation. In December, 1919, a law was passed that

was intended to encourage local investors and to attract foreign capitalists for petroleum development. All public lands were opened for prospecting under government license, and on discovery a contract was given for development. Aliens and foreign corporations are required to comply with all laws relating to alienage and naturalization and abide by the provisions of the law with regard to government supervision, taxes, rates of leases and causes of forfeiture. The president of the republic, on recommendation of the board of finances and council of ministers, must approve the leases. Lessees must agree that at the expiration of the term or on forfeiture the nation will acquire free of charge all property of the concession. Leases may be forfeited if transferred to a foreign government or if the right of government supervision is ignored or evaded, and for other reasons. The government assumes the right to impose certain taxes and penalties on land owners who fail within a stated period to develop their lands when they are within known oil territory.

Ecuador's geologic structures are favorable for cheap production of oil. Three separate localities are to be tested under a concession granted an English syndicate. A British company is seeking to acquire rights to 60,000 acres on the Santa Elena peninsula. The total production of the country is 40,000 barrels. A tax of six percent is levied on the gross production of each exploration. Unless petroleum mines are adjudicated, the state owns them exclusively. The right of a holder of a patent ceases if exploration is not begun within two years. A change in the petroleum laws of the republic is regarded as indispensable for encouragement of the industry.

Peru has granted over 17,000 known claims, all of which have been located, and considerable presumably oil-bearing territory in addition has been granted. Peru has no specially adapted petroleum mining code. Concessions are granted and exploration and developments proceed under the general mining code of 1900. A new petroleum bill has been introduced and has passed the Senate and may become a law at the next session of the Peruvian Congress. A law of August 19, 1917, imposes certain taxes on crude petroleum and its refined products based on New York quotations. Petroleum products exploited in mountainous regions are exempted from taxation. An exportation tax of one shilling per metric ton is imposed, but neither crude petroleum nor its derivatives can be exported until the requirements of the home market have been supplied.

The Venezuelan government encourages foreign capital to acquire petroleum concessions and desires contracts with responsible companies which will proceed immediately with extensive development. Both British and American companies are active. Natives have been active in taking up concessions without the idea of operating but with a view of selling to foreign companies. The estimated production for 1919 was 425,000 barrels. The principal difficulty lies in lack of transportation and the only solution rests in the construction of pipe lines. There is only one refinery. Operations are governed by special law and contracts for all purposes must be procured from the federal executive. A tract cannot be explored to exceed 10,000 hectares, and not more than six permits can be issued to one individual. On discovery of petroleum, the tract is divided into plots of 200 hectares and the explorer is given a contract for the exploitation of the petroleum discovered. No restraint is placed upon the issuance of permits and contracts and they may be as-

signed to any person or company. However, one person or company may not obtain more than 40,000 hectares for oil operations.

Costa Rica's concessions to British interests include one-half of the republic's territory. The concession runs for fifty years from 1918 with a possible extension of fifty years. The terms are extremely favorable and the company has almost unlimited powers. Thirty thousand pounds must be spent in exploitation in three years and one hundred thousand pounds during the succeeding seven years. The company is required to pay a duty of 25 cents per one thousand kilograms of all crude petroleum sold.

Guatemala's unfavorable laws have prevented active operations within her boundaries, although some explorations have been made in the hope that a more favorable legislative code will be enacted. American and British interests have been exploring in Guatemala during the last year. By a decree of 1916, the nation reserves absolute title to all sources of petroleum and their exploitation would be under a non-transferable lease not to exceed ten years. There are no producing wells.

Salvador's richest fields so far discovered are new ones, and indications are that they are capable of great development. In November, 1920, it was reported that English investigators had made especially important discoveries of indications. The state owns all petroleum deposits, except such as surface owners had discovered and reduced to possession prior to 1918.

TROUBLES OF AMERICAN OIL CONCERNS IN COSTA RICA

DIFFICULTIES ENCOUNTERED by American oil companies operating in foreign countries are shown in a report made to Congress by Secretary of State Hughes on the Pinto-Greulich concession made in 1915 by the Costa Rican government to Dr. Leo J. Greulich of New York. The concession granted an exclusive right for four years to explore all oil deposits in Limon, Puntarenas and Guanacaste, and a fifty-year contract for operating purposes with a preferential right of renewal. The contract called for the organization of the Costa Rican Oil Corporation and forbade the transfer of rights to any foreign state, or government. The concessionaire was to pay 15½ percent of the value of the substances taken from the soil, the value to be the average price obtained by the company during each year for the crude product at the mouth of the well. The company was to give the government of Costa Rica free crude petroleum for railroads and gas for lighting government and municipal buildings and schools.

Henry F. Sinclair undertook to acquire shares of stock held by Lincoln G. Valentine and his associates in the Costa Rican corporation and Sinclair interests organized the Sinclair Central American Oil Corporation, the concession remaining vested in the Costa Rican Oil Corporation.

Donald F. MacDonald formerly of the U. S. Geological Survey and the Panama Canal Commission, organized a staff of twenty technical men and laborers for exploration work which was begun in Costa Rica in March, 1917. The company sunk eight pits from which small amounts of petroleum were obtained and in July of that year, upon receipt of preliminary reports from the geologists, assembled material and supplies for drilling deep wells. For a year the War Trade Board of the United States prevented the exportation of this equipment. As soon as the export order was obtained the materials were shipped to Costa Rica, arriving in December, 1918. The first well

was commenced near Uscari in March, 1919. A small amount of oil was found in this well at a depth of 618 feet. Drilling continued to 1,100 feet, when the casing collapsed.

A second well was started in June, 1920, and at a depth of 1,318 feet the casing collapsed, although a small amount of oil was found at 688 feet. A new site was selected at Cahinta in November, 1920, and the company has completed construction of a camp there. The company completed a survey of 4,000 square kilometers which it is entitled to retain, and has notified the Costa Rican government that it relinquishes all rights in the provinces of Puntarenas and Guanacaste and that the area it retains occupies the belt along the Atlantic coast extending from the Panaman to the Nicaraguan boundary.

The contract stipulated that the contractor must expend during the first two years, between November 12, 1916, and November 12, 1918, two hundred thousand colones in exploration and during the next three years expiring in November, 1921, 250,000 colones in exploration or exploitation. The company reports a total expenditure of 308,000 colones during the first two years, which outlay has been acknowledged by the Costa Rican government. Between the beginning of the second period and October, 1920, the company reports expenditure for exploration and exploitation aggregating 1,580,898 colones.

In October of last year the Costa Rican government notified the Costa Rican Oil Corporation that the control of the corporation by the Sinclair Central American Oil Corporation was in violation of the contract and that the company must produce and market Costa Rican Oil within three years. In August, 1920, the Costa Rican Congress recommended to the government that it begin action in the Costa Rican Courts for cancellation of the Pinto-Greulich contract.

Secretary Hughes says a controversial question has arisen between owners of the Pinto-Greulich concession and certain other American concerns regarding ownership of sub-oil products in lands in the concession, these sub-oil products being claimed by those concerns under grants said to precede the concession.

In the case of the Amory Oil concession, the charge was made that an American company obtained an oil concession in Costa Rica for British interests. In May, 1916, a concession was granted by the Costa Rican government to Miguel D. Ferrer, attorney for John H. Amory & Son, New York. It gave for twelve years exclusive right to discover petroleum in Cartago, Alajuela, Heredia and San Jose provinces, and a contract to exploit for fifty years, for a royalty of twenty-five cents per metric ton on hydro-carbons exported or sold and the delivery of free oil for railways and natural gas for public buildings in Costa Rica. The concession also gave rights to export coal which might be found on the lands, stipulating that at the end of fifty years the deposits, resources and lands should revert to the republic with a preferential right for renewing the contract. The right was also given to transfer the concession to the Central Costa Rican Petroleum Company, to be organized in four years.

Secretary Hughes in his report says the interests now in control of the Amory concession would seem to be indicated by an address of D. E. Alves, president of the British Controlled Oil Fields, Ltd., at a meeting of the stockholders of the company at Montreal December 28, last, in which Mr. Alves said that the concessions granted by Costa Rica covered 6,000 square miles; that drilling outfits had reached Port Limon but that drilling had been prejudiced by action of the Costa Rican government, which had changed since the concession had been granted, the new government having annulled the concession. Mr. Alves said: "foreign oil interests have intrigued to this end," and that the action of the Costa Rican government

had stopped operations for the time being. He further said the company was defending its position and receiving the "powerful support of British authorities." Mr. Alves was also quoted as saying that machinery has been created which places the whole of the oil supply which may be obtained from this vast chain of territories under British control. A permanent voting trust had been created, the result of which would be that "no matter who may acquire the controlling interest, however financially powerful they may be, they can never divert a single barrel of oil from national or imperial requirements."

The Hughes report states that in July of last year, the Costa Rican Congress declared null all acts of the former administration, including the Amory concession. The report states that the fact that the persons to whom the Amory concession was nominally granted were of American nationality, raised the question of the support which might be given to the undertaking by the American government. The company holding the Amory concession in communications to the State Department concealed participation of foreign interests in the contract, says Secretary Hughes. The State Department declared prior to negotiations of the Amory concession that it would not consider any claim of American citizens arising from this transaction with the Tinico, or former, Costa Rican administration, which made the Amory concession, as worthy of diplomatic support. The attitude of the State Department towards the concession was based upon its general policy toward a usurping, revolutionary régime in Costa Rica, which was never recognized by America and which passed out of existence in 1919.

The Costa Rican government and the British minister at San Jose on February 14, last, signed an agreement providing that certain questions relative to the Amory concession should be submitted to arbitration by the Spanish Minister at San Jose, but the agreement was rejected by the Costa Rican Congress March 7, 1921.

BRITISH GOVERNMENT WILL NOT BUY COAL DURING STRIKE CRISIS

COMMERCE DEPARTMENT advices from London indicate the British authorities have no intention of purchasing coal for government account to tide the country over the present crisis. Every possible encouragement, however, is extended importers of coal, including assurance of government protection for unloading cargoes. The French controller has agreed to remove all restrictions from northern France to British ports. So far no coal has been discharged under government protection, but on May 15 eight cargoes had been unloaded in different ports by voluntary labor. Domestic coal rations are now limited to cooking except in cases of serious illness. Charter to transport American coal to Great Britain at 35 shillings per ton; Gibraltar at 32 shillings 6 pence per ton, indicating marked increase freight in each case.

ZINC EXPORTS.—Shipments of zinc pigs and slabs made from domestic ores were made during March as follows: to Canada, 3,750 lbs; to Mexico, 136,833 lbs; British West Indies, 520 lbs; Brazil, 4,402 lbs; Chile, 10,000 lbs; Peru, 9,600 lbs; Philippine Islands, 9,001 lbs; total, 174,106 lbs. Sheets and strips made from domestic ores were exported as follows: to Italy, 560 lbs; Norway, 30 lbs; England, 29,598 lbs; Canada, 99,296 lbs; Costa Rica, 488 lbs; Honduras, 850 lbs; Nicaragua, 217 lbs; Panama, 4,638 lbs; Mexico, 10,731 lbs; Cuba, 2,438 lbs; Haiti, 1,233 lbs; China, 40 lbs; Australia, 6,304 lbs; Philippine Islands, 15,442 lbs; total, 171,865 lbs. Department of Commerce figures.

WORLD MINERAL SITUATION REVIEWED IN COMMERCE DEPARTMENT ADVICES

TABLE ADVICES to the Department of Commerce are to the effect that there have been diminished imports into Austria of coal, iron, steel and petroleum. Stocks of British, Dutch, and German steel and iron, and Rumanian gasoline and oil in Austria are greater than last year. Coal supplies are available in adequate quantities and the market is overstocked with iron goods.

In Belgium there has been a revival in the export of coal and metallurgical products owing to the British strike. Considerable stocks of copper ingots and zinc are on hand.

Czechoslovakia imported 351 million crowns of chemicals, 55 million crowns of metals, agricultural machinery, and automobiles; 48 million crowns of mineral oils and 65 million crowns of iron during the first quarter of 1921. The coal tax which in eight months of 1920 yielded 894 million crowns is to be reduced to aid the industry. Coal mine warehouses owning sidetracks will be compelled to subscribe to a two billion crown bond issue for extensions to telephone and railroad service, in proportion to the telephone and freight service used.

The French market is overstocked with coal and efforts are being made to export the surplus stocks.

Export prices for German iron and steel products in April were lower than in March. The iron and steel industry is depressed.

In Scandinavia there are excessive stocks of coal and chemicals. Stocks of iron and steel exceed the export demand and their production has been curtailed.

In Spain there has been a decrease in coal imports and a decrease in exports of iron pyrites ore, of which large quantities are on hand.

In England stocks of iron and steel are in excess of last year's stocks. High prices are predicted for copper, lead, spelter and tin. Prices of iron and steel were lower in April than in March.

In Australia stocks of wire are equal to a year's supply and sheet steel and sheet iron and tin plate stocks are also large.

In the Straits Settlements holders of tin are counting upon revival of the American tin market and smelters say that accumulation of tin prior to February 26, in the Dutch East Indies and Straits Settlements is a result of the government's purchases for holding, so it will not be put on the market until the market is stronger.

In Argentine the steel market is overstocked and the demand dull. Manufactures of steel and hardware estimated at a total value of over fifteen million dollars remain at the customs house. Belgian and German competition in steel is keen and Belgium and Germany are quoting prices 25 percent lower than American firms.

In Brazil, although there have been decreases in stocks of iron and steel during the last two months, stocks are greater than during the same period of last year. Large quantities of German and Belgian metal goods are being received.

In Mexico the export commodity market is overstocked with minerals. Fewer American salesmen are seen in Mexico than formerly, although American capital is entering the country in limited quantities. There is a possibility that valuable concessions may be granted for petroleum exploration.

Egypt has created a Bureau of Commerce and Industry, which has instituted a permanent exhibition illustrating Egyptian industries. Among the exhibits are brass, iron, copper, and silver.

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ATTORNEY SEES VALUE OF MINING CONGRESS BULLETINS

"EFFICIENT and up-to-the-minute," is the description applied by H. L. Scaife, prominent lawyer of Washington, to the bulletin service of the American Mining Congress. When it is considered that Mr. Scaife as a commerce counsel is familiar with all the methods for keeping posted commonly resorted to in the national capital, and that he has first-hand information for appraising them, the value of his approval is seen to be of importance. Mr. Scaife's appraisal of the Mining Congress Information Service was contained in the following communication:

May 12, 1921.

Mr. J. F. Callbreath,
Munsey Building,
Washington, D. C.

My dear Mr. Callbreath:

I believe that it is generally recognized that the Information Service of the American Mining Congress is not only efficient and up-to-the-minute for persons interested in mining, but I have recommended it to a number of business concerns in no way connected with the mining industry, because of the information it gives that can be utilized in any business.

Your daily bulletin, giving changes in regulations of the various bureaus of the Government, sometimes affecting overnight the conduct of business and policies in the conduct of business, its résumé of important Supreme Court decisions which establish new precedents in business management, and its forecasts of what is going on in Congress and Government circles, is to me a remarkable and useful work.

The man who does not keep up these days will soon get hopelessly lost and it is a day when thousands of dollars might be lost or saved according to the accuracy of a man's knowledge as to what he is really expected or required to do in meeting the changes and reversals in Government decisions. When 22,594 bills and joint resolutions were introduced in a recent Congress and legislation in general is reaching out to infinity, your bulletins are very valuable and they are so pithy and concise that a business man catches on with a minimum expenditure of time and money.

What really prompted this letter is the fact that a short time ago I wanted some information in no way connected with mining matters and I needed it quick. I supposed that a special investigation would have to be made until I thought of looking in your Information Service files, where I found that you had already analyzed the entire subject and had expressed just what I wanted in about three lines. Another thing about your service is that if you do not have some special information desired, you know where and how to get it promptly.

When people do not get good service, they are ready to make a rough-house, and, as it is a poor wheel which will not turn both ways and, since I have made use of your information service from time to time, I felt a word of appreciation would not be undeserved.

With kindest regards, I am,

Very truly yours,

H. L. SCAIFE.

NATIONAL FOREIGN TRADE CONVENTION

"GREATER PROSPERITY through greater foreign trade," was the keynote of the eighth annual National Foreign Trade Convention which was held in Cleveland, May 4-7, and attended by approximately two thousand delegates, representing important elements in American industry.

Throughout the convention three major ideas were emphasized by the important speakers at the general

meetings and developed more fully in the group sessions. These ideas may be summarized thus:

1. The export trade of the United States furnishes the margin of distribution which enables American industry to carry on at full capacity with resulting prosperity to industry, labor and the public. This export margin now amounts to approximately 25 percent of our total productive capacity.

2. Cut off this margin or impair the steady flow of American commodities over-seas, and inevitably there will be a slowing up of production at home resulting in unemployment and partial stagnation. As James A. Farrell, president of the United States Steel Corporation, pointed out in his opening address, the most striking illustration of this effect was shown in 1914. The industrial situation at home was splendid. There was nothing wrong in the domestic market but the stoppage of the export movement created stagnation during the months of August and September. The present situation also furnishes obvious evidence of the effect of the slowing up of export movement upon American industry.

3. In order to prevent continued depression in such basic industries as copper, cotton, staple agricultural foodstuffs, as well as in manufacturing industries, it is essential that American business should create a sound mechanism whereby our foreign customers can be furnished with long-time credits, making it possible for them to resume productive processes. Only through the creation of such a mechanism will American industry be able to compete effectively abroad, and through the utilization of the necessary margin of distribution in the foreign markets be able to maintain full production and continued expansion. Such a mechanism is provided in the Edge Law banking institution—the Foreign Trade Financing Corporation—which should be supported as a national institution essential for the further industrial progress of the United States.

The above summary is a condensed statement of the gist of the remarks made by F. I. Kent, vice-president Bankers Trust Company of New York; James A. Farrell, president, U. S. Steel Corporation; E. N. Hurley, former head of the U. S. Shipping Board; W. C. Redfield, ex-Secretary of Commerce, and E. M. Herr, president of the Westinghouse Electric Company.

In addition to the emphasis placed on the necessity of developing a proper mechanism for financing our export trade, thereby making possible its continuance, considerable attention was given to the formulation of a proper American maritime policy. The emphasis in this regard was placed on private rather than public development, and the necessity of furnishing such aid as might be necessary to enable American shipping companies to meet foreign competition, and the importance of maintaining the American merchant marine as an adjunct in the building up of our foreign trade.

The serious effect of the present system of double taxation on the incomes of American companies doing business over-seas was pointed out and recommendations requesting the elimination of such taxation were embodied in the final platform of the convention.

Another point which was also placed in the recommendations of the convention but to which little general discussion was given was the importance of framing all American tariff legislation in such a way as to provide the Executive with a means of discriminating against those nations which discriminate against American commodities and of favoring those which favor American commodities. It was felt that such a bargaining feature in our tariff legislation would be beneficial.

J. G. BRADLEY HEADS NATIONAL COAL ASSOCIATION

J. G. BRADLEY of Dundon, W. Va., was elected president of the National Coal Association at the annual convention, held in New York May 19-21. Mr. Bradley is president of the Elk River Coal & Lumber Company. Other officers were elected as follows:

Vice-presidents: Alfred M. Ogle, president Vandalia Coal Company, Terre Haute, Ind.; Erskine Ramsay, first vice-president Pratt Consolidated Coal Company, Birmingham, Ala.; Ira Clemens, president Clemens Coal Company, Pittsburgh, Kans.; J. D. A. Morrow, Washington, D. C. Secretary—W. B. Reed, Washington, D. C.

Treasurer—J. J. Tierney, vice-president and general sales manager Crozer-Pocahontas Company, Philadelphia, Pa.

Executive Committee: J. G. Bradley, chairman; C. E. Bockus, president Clinchfield Coal Corporation, New York, N. Y.; T. W. Guthrie, president Hillman Coal & Coke Company, Pittsburgh, Pa.; G. W. Reed, vice-president Peabody Coal Company, Chicago, Ill.; A. J. Maloney, sales manager Chicago, Wilmington & Franklin Coal Company, Chicago, Ill.; H. N. Taylor, vice-president Central Coal & Coke Company, Kansas City, Mo.; J. P. Walsh, vice-president Pittsburgh Coal Company, Pittsburgh, Pa.; T. H. Watkins, president Pennsylvania Coal & Coke Company, New York, N. Y.; T. T. Brewster, vice-president Mt. Olive & Staunton Coal Company, St. Louis, Mo.; D. B. Wentz, president Stonega Coke & Coal Company, Philadelphia, Pa.

Directors at large: J. G. Bradley; F. C. Honnold, Chicago, Ill.; E. C. Mahan, Knoxville, Tenn.; P. J. Quealy, Kemmerer, Wyoming.

The following directors were re-elected: J. S. Brophy, Frostburg, Md.; J. C. Brydon, Somerset, Pa.; A. R. Hamilton, Pittsburgh, Pa.; C. H. Jenkins, Fairmont, W. Va.; F. W. Lukins, Kansas City, Mo.; Andrew Maloney, Chicago, Ill.; Quin Morton, Charleston, W. Va.; R. M. Randall, Saginaw, Mich.; G. W. Reed, Chicago, S. H. Robbins, Cleveland; W. J. Sampson, Youngstown, Ohio.

Peter Kooi was elected for one year to succeed W. J. Carney of Chicago. George Heaps, Jr., of Des Moines was elected for one year to succeed E. M. Gray of Des Moines. L. C. Crewe of Knoxville, Tenn., was elected director at large to succeed E. C. Mahan.

The following directors hold over for one year: George H. Barker, Ohio; C. E. Bockus, Virginia; W. D. Barnum, Washington; T. T. Brewster, Illinois; Ira Clemens, Kansas; T. W. Guthrie and T. H. Watkins, Pennsylvania; W. H. Huff, Colorado and New Mexico; A. M. Ogle, Indiana; Erskine Ramsay, Alabama; C. W. Taylor, West Kentucky; R. T. Price, Oklahoma and Texas; J. J. Tierney, West Virginia.

One of the most important steps taken by the convention was the appointment of a committee to represent the association at the contemplated conference on the Frelinghuysen coal bill, at Washington, and in other legislative matters. The committee was given full power to act and was not given any instructions. It consists of W. K. Field, president Pittsburgh Coal Company, Pittsburgh, Pa.; E. E. White, president E. E. White Coal Company, Beckley, West Va.; Ralph Crews, of Shearman & Sterling, New York, N. Y. These three were selected by a committee of operators representing every bituminous district.

Upon being presented to the convention, President-elect Bradley said, in part:

"I feel that none of us know what the future contains, but we do know this: that coal is, next to food, the great

and important natural product of this country. It is our duty to supply this country with the coal to keep the wheels turning, to warm the mother and father and the children. We must approach this task in the spirit of service, and if we do we will put the coal industry of the United States in the foremost ranks and our citizens as a whole will be only too willing to render us the praise that is our due."

The association adopted strong resolutions endorsing the administration of the retiring president, Col. D. B. Wentz. The resolution provided, among other things, "That this association do hereby express their high and sincere appreciation of the unselfish devotion to the interests of this association shown by our retiring president, Colonel Daniel B. Wentz, in the discharge of the duties of his office, and the able manner in which he has guided the affairs of the association; and that we do hereby commend unqualifiedly his work and efforts on behalf of our association."

WHOLESALE COAL SECRETARY PROUD OF HIS ASSOCIATES

MOST OF THE COAL MEN are red blooded citizens," said Charles S. Allen, secretary of the Wholesale Coal Trade Association of New York, after he and his attorney, Gibbs L. Baker of Washington, were freed on May 4 of the charge of using the mails to defraud.

Mr. Allen and Mr. Baker were specifically charged with securing fees on the promise of being able to "fix" the Department of Justice and they were indicted in New York upon the instance of Armin W. Riley, at that time head of the government's "flying squadron." Mr. Baker was also accused of saying he had a strong influence with William McMurtrie Speer, a special U. S. attorney. These charges were also made before the Calder Committee. Both men denied the charges and asserted they were instigated as a result of their efforts to prevent profiteering in bituminous coal.

F. G. Caffey, U. S. attorney, requested Judge Hand to dismiss the indictment, after he had resubmitted the testimony to the April grand jury, at the request of the Attorney General, and the jury men had decided there was no reason for indictment. Messrs. Allen and Gibbs had previously declined to secure dismissal of the indictment by taking advantage of technicalities.

After the case had ended Mr. Allen announced his intention of bringing suit against Riley for \$100,000 damages for malicious prosecution.

COAL TO ARGENTINA.—The Guaranty Trust Company, of New York, announces that as a result of the strike of British Coal Miners, the United States is now supplying more than nine-tenths of the coal imported into the Argentine Republic, according to information just received from South America, by the Guaranty Trust Company of New York. One-tenth of the imported coal continues to be supplied by Great Britain, our chief competitor in the Argentine coal market, on account of her control of practically all of the railroads, which furnish 75 percent of the total demand for coal in that country. Although the present diversion to the United States of the bulk of this coal trade is due to temporary conditions, nevertheless American coal exporters have gained an important foothold on the east coast of the Argentine and a return to normal conditions should see a decided strengthening of their position. Argentine coal importers are at present faced by a serious situation as a result of the policy of the labor unions.

PREVENTION OF COAL LOSSES DISCUSSED BY MINES BUREAU ENGINEER

THREE METHODS for overcoming losses of coal in mining are discussed by George S. Rice, chief mining engineer of the Bureau of Mines, in a recent paper entitled "Some Factors Affecting Losses of Coal in Mining." Stating that many mine owners concede that their total recovery is 60 or 75 percent, Mr. Rice treats proposed remedies as follows:

"If the government owned all the coal, as was the case in the western states before the coal lands were sold, and then leased the coal under conditions that would insure the maximum recovery, that would provide a direct remedy and all operators would be under the same competitive conditions. This plan has been under consideration in Great Britain for the past couple of years and in this country is being put into effect with regard to coal on government lands so far as can be done with reference to competition with privately owned coal lands. Through the leasing enactment of February 25, 1920, the coal in the public lands of the West will hereafter be leased and not sold. Operating regulations which look to better recovery of the coal have been devised by the Bureau of Mines in co-operation with other interested agencies, and these have been approved by the Secretary of the Interior.

"Another remedy that has been suggested is to forbid by federal statute that any coal should be left in the ground that could be recovered by systematic mining. This does not seem practical from a constitutional standpoint, and if such a law were constitutional and were enacted who would pay the bill? Many mining operations would be driven into bankruptcy, or else the government would either have to pay the additional costs, or by remission of taxes or other means equalize the operations competitively. This plan may be dismissed as being too complicated for consideration as a practical solution.

"One of the helps will be to overcome seasonal mining, which has been so much discussed, but this can only be made effective when the number of new mining operations is curtailed. It has always been the case in the bituminous industry of this country that the development of new mines has gone on far more rapidly than the increased use of coal.

"Turning to other means, another solution is to keep up a campaign of education and through pressure of public opinion and advice of the more progressive operators bring all operators into line who can improve their methods. Instruction in coal mining should be encouraged in the mining schools of the country. At present most of the mining schools are devoting themselves largely to turning out metal mining engineers, although the need in that direction is not nearly so great as for development of high class coal mining engineers."

Concluding his report, Mr. Rice states that while coal mining methods are not what they should be in the matter of preventing loss of national resources, yet this condition had not arisen from mere neglect, but is in general the result of too easily accessible resources with consequent over-competition in normal times, with intermittency of regular work and an absence of governmental control over the bulk of the nation's coal resources which is privately owned.

ORIGIN OF EARLY COAL BUYING.—There has been much discussion as to the origin of buying of next winter's coal supply during the spring. The Anthracite Bureau of Information holds that it was advised as long ago as 1831, when Stephen Girard in his will left a fund to provide fuel for Philadelphia's poor. He instructed his executors to buy between the months of March and August, when prices were lowest, for distribution during the following January. His good judgment then is eminently sound today, for the same and additional reasons.

FULL COAL BIN IS GOOD INSURANCE POLICY

RETURNS from the government coal questionnaire as of April 1 emphasize anew the wisdom of laying in an early and plentiful supply of coal for next season's use, in the opinion of Director George Otis Smith of the Geological Survey. Mr. Smith in an interview with a MINING CONGRESS JOURNAL representative characterized a full coal bin as a "good insurance policy."

"This inventory," Mr. Smith said, "may be summed up in the statement that the production of coal during the first quarter of 1921 was in round numbers one hundred million tons; that consumption and exports amounted to one hundred and eight million tons; and that the deficit—eight million tons, the difference between production and consumption—was made up by drafts upon the stocks of consumers. Such a draft on consumers' reserves may be likened to the physical exhaustion of an undernourished people in time of war. They may not perhaps suffer wholesale death by starvation, but their resistance to disease and hardship is impaired.

"He would be a rash man who should attempt to tell an individual consumer of coal at a time of depression like the present exactly how much coal he ought to buy, for, after all, the answer to that question depends not on how much the consumer may have used in the past but rather on how much he is going to need in order to make the goods to fill the orders that he expects to have. Every well-wisher of the coal consumer, however, every one who is anxious that for the best interests of all concerned the run-away market of 1920 may be avoided, will join in commending to the industrial plant the example of the public utilities and suggesting that in so far as requirements can clearly be foreseen now is the time to buy.

"The consumer must also keep in mind that the figures of stocks given out by the Geological Survey represent the condition as of April 1, and that on the whole, even with the gratifying turn upward of the production curve in the middle of April, consumption has probably continued to exceed current production.

"The consumer should realize the position of strength that he has won by building up this 40,000,000-ton reserve as of January 1. He should realize that the surest way to create a seller's market, an atmosphere in which the buyer must take coal on the terms at which the seller offers it, is to let his reserve fall so low that he must buy on a hand-to-mouth basis without freedom to choose the terms he will accept. Again, it is a situation where the enlightened interest of both parties lies in a tranquil, steady market."

In additional remarks advocating current purchases against future requirements, Mr. Smith said: "Insurance—that's what it is. If you have enough coal to last a few months, you just sit in your chair and let people try to sell coal to you. You are not going to run around the country and try to pick up coal. People can well afford to have that insurance."

PANAMA RAILROAD LETS COAL CONTRACT

THE MINE PRICE of \$3.36 per gross ton will be paid for coal during the year ending April 30, 1922, by the Panama Railroad Company. Contracts for 220,000 tons and 400,000, respectively, have been let to the C. G. Blake Company and the Pocahontas Fuel Company.

APRIL ANTHRACITE SHIPMENTS.—The Anthracite Bureau of Information reports shipments during April totaling 5,967,465 tons, an increase of 229,694 tons over March and of 1,153,254 tons over April of 1920.

MORE WORK AND MORE TAXES FOR ANTHRACITE MINERS

PENNSYLVANIA'S NEW LAW taxing anthracite mining goes into effect on the first day of next month. It creates a levy of one and one-half percent upon all sizes and is applicable to anthracite alone, although the 1915 law was declared unconstitutional because it exempted bituminous. The tax will amount to twelve cents a ton upon coal selling for \$8 at the mines, to about nine cents per ton on pea coal and from two and one-half to five cents on buckwheat.

The law prescribes that superintendents or other persons in charge of mines and washeries shall ascertain the number of tons mined daily and assess the value and make a report to the auditor general of the state by the first of February each year of his tabulated figures for twelve months. If the auditor general and the state treasurer are dissatisfied with this report, they may make such assessment as they think proper, and for the purpose of making such assessment they may require the production of the private books, papers and reports of the mine affected.

COAL LEADS AS POWER PRODUCER

PRODUCTION of power during the last three months of 1920 and the first two of the current year is reported by the Geological Survey as follows:

By coal—October, 2,408,678 kilowatt hours; November, 2,317,042; December, 2,326,792; January, 2,194,253; February, 1,977,197.

By water—October, 3,751,320; November, 3,705,507; December, 3,761,100; January, 3,558,394; February, 3,192,936.

Coal consumed, by short tons, was as follows: October, 3,169,081; November, 3,167,210; December, 3,208,373; January, 2,981,134; February, 2,642,855.

Fuel oil was consumed as follows: October, 1,169,495; November, 960,958; December, 949,946; January, 896,744; February, 771,804.

Gas, in thousands of cubic feet, was consumed as follows: October, 2,404,675; November, 1,909,313; December, 1,873,130; January 1,707,413; February, 1,469,418.

The total production of power during this period, in thousands of kilowatt hours, was as follows: October, 1,342,642; November, 1,388,465; December, 1,434,308; January, 1,364,141; February, 1,215,739.

AUSTRALIAN GOLD OUTPUT DECLINES

COMMERCE DEPARTMENT reports show the gold production of Australia to be steadily on the decline, the drop being consistent from 1909, when 2,968 fine ounces were produced, to 1920, when the figure was 943,692, the lowest in history. General depletion of mines in the principal gold areas is accredited with the major responsibility for the decrease, although the excessive wage demands made by labor are also largely responsible. Should the price of gold in London fall to the mint value it is said it will be impossible for Australian mines to produce gold at anything but a loss.

It is understood that gold amounting to \$1,215,000 was shipped from Australia to San Francisco recently. In this connection it is noted by representatives of the Commerce Department that the export of gold from Australia is continuing. Last year the export of current gold amounted to \$21,870,000. This did not affect the reserves. Only one bank in the country is allowed to export gold out of the commonwealth.

NO ANTHRACITE SHORTAGE EXPECTED

THERE WILL BE no anthracite shortage this year unless a winter of unusual severity or some other unforeseen circumstance brings it about, according to a forecast of the situation made by the Anthracite Bureau of Information, Philadelphia. This prediction is contingent, however, upon normal purchasing by the public during the next few months. Shipment figures indicate a decline in purchases since February, and of course if this continues it will mean a loss of tonnage which it may be impossible to recoup.

Anthracite production is generally fairly steady from year to year. Even in 1920, despite the buyers' panic, production was practically normal. Likewise, despite the panic, production per consumer was about the same in 1920 as it was four and five years previously.

"There need be no shortage this year," the Bureau announces, "nor in any year, if consumers will do their share and not postpone purchasing until the approach of winter weather."

"Mines and miners are ready and willing to produce the normal output. It should be remembered that the anthracite region is virtually immune from car shortages, except when severe storms may prevent transportation. Under normal conditions there are always enough cars available for the anthracite mines, and this has been the case for many years. If coal is ordered, shipment is sure to be prompt, provided orders are not bunched into a few months of the year.

"Facilities for steady buying are therefore at their best in the anthracite industry, since good transportation is virtually assured, and a steady flow of coal from the mines to the consumers during the spring and summer months is possible. The experience of the years preceding the war shows this to be a sure preventive of scares about lack of coal when winter approaches.

"Coal must move about as fast as it is mined. It is impracticable for the majority of the mines to store any coal, and demurrage charges prevent holding unsold coal in railroad cars. Storage charges and demurrage in any event mean added cost to the consumer. There is no demurrage on next winter's coal when it is in the cellar.

"Production is at its best in the spring and early summer. Weather conditions bear heavily on anthracite mines. For instance, owing to the use of water in the preparation of coal, and to the excessive amount of water in many mines, production is often handicapped in the autumn and winter. It might be mentioned that the water hoisted from the anthracite mines every year weighs about 30 percent more than all the coal—anthracite and bituminous—produced by the entire country in a year."

ANTHRACITE CONTRACT AWARDED.—The Philadelphia and Reading Coal and Iron Company has been awarded a contract by the Bureau of Mines to furnish coal to the Government Fuel Yards, Washington, at the following prices, f.o.b. mine: 7,800 tons white ash furnace, and 8,800 tons white ash egg, \$7.75 each; 8,200 tons white ash stone and 1,700 tons white ash chestnut, \$8.05 each; 2,600 tons white ash pea, \$6.40; 480 tons red ash stove, \$8.55.

SIBERIA EMBARGOES METALS.—The Far Eastern Republic, Siberia, has temporarily prohibited the export of gold ore, gold dust, bullion, coin, wrought and tinsel, silver bullion and coin, wrought silver, platinum, all other metals and their alloys, and articles manufactured therefrom, chemicals, mineral paints, manganese, molybdenite, and other ores of rare metals except silver lead ore.

OIL PRODUCTION AND CONSUMPTION FIRST QUARTER 1921

STOCKS of gasoline, kerosene, gas and fuel oil and lubricating oil were greater on March 31, the end of the first quarter of 1921, than on January 1. Production of gasoline and gas and fuel oil was greater than during the corresponding quarter of last year, while that of kerosene and lubricating oils was less.

The comparative analysis for the quarter, prepared by the Bureau of Mines, follows:

GASOLINE			
<i>INCOME</i>	1921	1920	1919
Stocks, January 1 . . .	462,381,837	446,793,431	297,326,983
Production	1,268,416,081	1,026,445,532	898,535,505
Imports	9,540,679	8,575,464	6,048,918
Total	1,740,338,597	1,481,814,427	1,201,911,406
<i>OUTGO</i>			
Exports	151,953,454	109,610,676	96,639,064
Shipments to insular possessions	9,230,954	3,190,434	3,048,527
Domestic Consumption	866,110,709	742,620,271	556,161,386
Stocks, March 31 . . .	713,043,180	626,393,046	546,062,429
Total	1,740,338,597	1,481,814,427	1,201,911,406

KEROSENE			
<i>INCOME</i>	1921	1920	1919
Stocks, January 1 . . .	393,070,923	339,319,690	380,117,829
Production	537,704,423	581,589,901	492,973,977
Imports			
Total	930,775,346	920,909,591	873,091,806
<i>OUTGO</i>			
Exports	209,222,292	233,782,442	184,740,900
Shipments to insular possessions	1,381,513	3,899,876	4,548,619
Domestic Consumption	273,804,353	348,610,156	389,124,664
Stocks, March 31 . . .	446,367,188	334,617,117	294,677,623
Total	930,775,346	920,909,591	873,091,806

GAS AND FUEL			
<i>INCOME</i>	1921	1920	1919
Stocks, January 1 . . .	837,404,414	714,124,455	659,001,357
Production	2,327,561,136	1,894,185,976	1,718,257,965
Total	3,164,965,550	2,608,310,431	2,377,259,322
<i>OUTGO</i>			
Exports	*522,036,638	*389,020,315	*232,970,028
Shipments to insular possessions	26,809,808	25,801,407	26,250,840
Domestic Consumption	1,610,801,165	1,613,305,851	1,368,970,648
Stocks, March 31 . . .	1,005,317,939	580,182,858	749,067,806
Total	3,164,965,550	2,608,310,431	2,377,259,322

*Includes fuel or bunker oil for vessels engaged in foreign trade: 1919, 2,017,955 barrels; 1920, 4,999,676 barrels; 1921, 6,441,231 barrels.

<i>INCOME</i>	LUBRICATING		
	1921	1920	1919
Stocks, January 1 . . .	160,522,477	137,318,934	138,853,574
Production	231,344,164	231,940,681	197,871,680
Total	391,866,641	369,259,615	336,725,254
<i>OUTGO</i>			
Exports	81,756,261	100,459,227	72,081,945
Shipments to insular possessions	1,698,006	1,567,046	556,588
Domestic Consumption	84,998,281	136,602,745	98,591,467
Stocks, March 31 . . .	223,414,093	130,630,597	165,495,254
Total	391,866,641	369,259,615	336,725,254

NEARLY 1,000 APPLICATIONS FOR OIL PROSPECTING PERMITS

DURING the month of April the Geological Survey reported upon the structural relations of 905 applications for prospecting permits for oil under the leasing act, bringing the total number of such reports made since July 1, 1920, up to 5,500. Since the passage of the leasing act reports have been prepared upon 128 applications for coal prospecting permits, and 103 were awaiting action at the end of April. Thirty-two applications for coal leases have been reported upon.

Nearly 900,000 acres were classified during April under the stock raising homestead law and designated for entry, as follows: California, 311,490 acres; Michigan, 320; Montana, 273,710; Oklahoma, 27,390; Wyoming, 240,190. The total area of lands classified to date is now more than 100,000,000 acres.

More than 1,000,000 acres were included during the month in formal orders designating land for entry as enlarged homesteads. These areas were as follows: Colorado, 897,130 acres; Idaho, 32,838; Montana, 110,638.

THREE-SHIFT SYSTEM IN THE IRON AND STEEL INDUSTRY

THE INTERNATIONAL Labor Office is sending a questionnaire on "experience with the three-shift system in the iron and steel industry" to countries which are members of the League of Nations. Open hearth furnaces, Bessemer converters and rolling mills are included in the inquiry, and each will receive a copy of the questionnaire. The Taylor Society, New York, is circulating the questionnaires in this country.

The object of the inquiry is to determine the extent to which the three-shift system has displaced the two-shift plan and the effects of the change on output, costs and the conditions of the working men.

CHANGES MADE IN OIL AND GAS LEASING REGULATIONS

TO ENCOURAGE PROSPECTING is the primary purpose of the leasing act of February 25, 1920, in the opinion of Secretary Fall. Since this purpose is most important, although the plain intent of the act is also to prevent monopoly, Secretary Fall has issued the following regulation:

THE COMMISSIONER OF THE GENERAL LAND OFFICE.

DEAR MR. COMMISSIONER:

Section 19 of the act of February 25, 1920 (41 Stat., 437), gives to certain persons who had located or acquired placer mining claims and who are able to meet other requirements imposed in the law, a preference right to prospecting permits upon such locations "upon the same terms and conditions, and limitations as to acreage, as other permits provided for in this act."

The limitation as to acreage which may be included in a single permit is found in section 13—2,560 acres. There is no limitation in section 19 as to the number of permits which may be obtained by a qualified person or persons who held the placer mining claims and are able to meet the conditions of the act.

As an administrative matter and in harmony with the evident intent of the act to avoid monopoly, a regulation was embodied in the oil and gas regulations of October 29, 1920, page 37, to the effect that qualified assignees since October 1, 1919, may secure preference-right permits, "but no such transferee will be permitted to hold permits exceeding 2,560 acres for such lands in the same geological structure, nor more than three times that area in the same State."

While the intent of the act is to prevent monopoly, its primary purpose was to encourage prospecting for and development of the oil and gas resources of the United States. In localities remote from transportation, refineries, pipe lines, and sources of supply, it may be difficult to secure the exploration of a wild-cat territory if the person or corporation conducting the exploration and development is limited to a maximum of 2,560 acres. Moreover, as stated above, section 19 is a remedial section, designed to take care of equitable claims of those who had initiated claims under the placer mining laws prior to withdrawals or prior to the repeal of the general mining laws as applicable to oil and gas deposits, and consequently no limitation was made in the statute as to the number of such locations which might be surrendered and made the basis of prospecting permits. The limitation above quoted is one of regulation and expediency and not of statute. Therefore, having in mind the purpose of the act and the scope of section 19, it is held that for development purposes, assignments of prospecting permits secured under section 19 of the act, to a qualified individual, corporation or association outside producing oil and gas fields and in localities without transportation facilities, refineries, pipe lines, or nearby sources of supply, for not exceeding five such permits in a State and near enough to each other for common development, whether contiguous or noncontiguous, may be presented for the consideration of the Secretary of the Interior, and his approval if he shall find same to be in the public interest.

To the extent of its conflict with the foregoing, said regulation under section 19 of the act of February 25, 1920, is modified.

Respectfully,

ALBERT B. FALL,

Secretary.

Persons who filed applications before February 25, 1920, cannot be deprived of their rights because of their own delay even when the Interior Department later designates the lands as within known producing structures. Secretary Fall has issued the following upon this subject:

THE COMMISSIONER OF THE GENERAL LAND OFFICE.

DEAR MR. COMMISSIONER:

Based upon rulings of the Secretary of the Interior, the regulations concerning oil and gas permits and leases approved October

29, 1920, state on page 36, "where after application under section 13 for a permit and before permit is granted the land is designated as within the structure of a producing oil or gas field, permit cannot be allowed."

This regulation and the rulings on which it is based were not issued under a mandatory provision of the statute, section 13 of the act of February 25, 1920, authorizing the Secretary of the Interior to grant to any qualified applicant a prospecting permit upon lands "wherein such deposits belong to the United States and are not within any known geological structure of a producing oil or gas field."

Rulings of this Department in cases involving a like situation, arising under other land laws, are to the contrary. In the case of Charles C. Conrad (39 L. D., 432), where a homestead application was filed, and where the entryman had performed all acts necessary to complete his application, but by reason of delay in action thereupon by the local office a first form withdrawal under the reclamation act intervened, the Department held that his rights could not be prejudiced by the inability of the local office to allow the application until after the withdrawal, but that they related back to the time when he filed in the local land office his application, accompanied by the required showing, including the fees, the land being then subject to his application.

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ALBERT B. FALL,

Secretary.

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Far from being hopeless, Mr. Doheny believes the Mexican fields show more indication of future large supply than any other in the world, with the possible exception of California. The Tampico-Tuxpam region alone, he believes, if its fields already proven yield as much per given area as that which has been taken from practically exhausted areas, will yield four billion barrels. And these regions form only a limited part of Mexico's oil area.

SECRETARY FALL ASKS FUNDS FOR OIL SHALE PROGRAM

THREE YEARS TIME and the sum of \$240,000 will be required for the Bureau of Mines to provide the information necessary for the sound establishment of the oil shale industry. Opinions of Secretary of the Interior Fall and Dr. E. A. Holbrook, acting director of the Bureau of Mines, to this effect were communicated Chairman Marion E. Rhodes of the House Committee on Mines and Mining in support of House Resolution 2,348, which makes an appropriation of \$140,000 for the first year.

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"The oil shale industry will eventually be developed into one of the large industries in the United States," Secretary Fall informed Congressman Rhodes. "This, however, will be a matter of many years, first, on account of the great amount of technical knowledge and practical experience which must be obtained and, secondly, on account of the large amount of capital which will be necessary for development on a commercial scale and which will be available only as the price obtained for the products justifies the expenditures. Unless fundamental investigations are started, the development of the oil shale industry will be delayed and as the need for the oil becomes pressing large installations will be made hastily. It is a safe prediction that if these are erected without sufficient fundamental knowledge, much avoidable waste will result. If the bureau can within three years place at the disposal of the many companies and the public interested in oil shales the basic facts on which the commercial industry can be built the investigation will justify itself many times over."

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The report of the committee has been referred to the House Committee on Mines and Mining and to the Secretary of Interior. Some of the recommendations embodied in the code have already been made to Congress by the Interior Department.

NAVAL RESERVES TRANSFERRED—President Harding has signed an order transferring from the Navy Department to the Interior Department the administration of the naval oil and oil shale reserves. The order covers the two oil reserves in California, 68,249 acres; the oil reserve in Wyoming, 9,481 acres; the shale reserve in Colorado, 45,440 acres, and the shale reserve in Utah, 86,584 acres. The transfer was made pursuant to the President's policy of co-ordinating the work of the different departments.

GOLD ACTIVITY IN NORTHWEST ARIZONA

(Arizona Correspondence by J. E. CURRY, Secretary Arizona Chapter)

FOLLOWING CLOSE in the wake of the cessation of copper mining activities throughout the state, renewed interest in the development of some of the promising gold and silver districts of Arizona has been awakened. The most notable instance of recent activities is in that section of Northwestern Arizona (Mohave County) known as the Secret Pass and Union Pass districts, lying in the Black or River Range, approximately fifteen miles north of the town of Oatman, which for many years has been furnishing the major part of all the gold produced in the state. After lying idle for several years, the resumption of development of the Nancy Lee mine in Secret Pass is being followed with more than ordinary interest, since this property has always been regarded by those most familiar with the "signs and ear-marks" of the country as possessing attractive possibilities. The work at this property is being centered in a strong true-fissure vein of calcite-quartz, with adaluria, fluorite and manganese oxide. A few miles distant from the Nancy Lee property in Secret Pass, another mining property (long idle) known as the Katherine has recently been opened up by its owners—the Sutro interests of San Francisco—to the 400-foot level, in which property it is said several million dollars in gold ore carrying a fine milling average has already been blocked out. It is understood that plans are being considered for the erection of a milling plant to be located a short distance from the Colorado River and the mine, to handle the Katherine ores.

It has been reported recently that the "Sunbeam," another promising property of this district, has recently been optioned to and examined by W. J. Loring of the Carson Hill Company, and president of the American Mining Congress.

Still another property—the Gold Chain—located between Secret Pass and the Katherine, has been attracting considerable notice and favorable comment, since its development has been under way the past two months, directed by a company of San Francisco gold operators. It is freely predicted that the Gold Chain may soon be in the "milling class." When it is considered that the two older operating mines (The Tom Reed and the United Eastern) lying just south of the Secret Pass—Union Pass districts, have furnished over 125,000 ounces of Arizona's 1919 gold production, and over 136,000 ounces of the 1920 production, it will be seen that the above mentioned new district lies "in an aristocratic neighborhood"—for the desert.

ARIZONA'S NEW EXPLOSIVE PLANT.—A meeting of the directors of the Apache Powder Company was held some time since at the company's office in Bisbee, Arizona, being attended by the following: T. H. O'Brien, general manager, Inspiration Consolidated Copper Co.; Thomas H. Collins, director, Calumet & Arizona Mining Co.; F. W. MacLennan, general manager, Miami Copper Co.; Norman Carmichael, general manager the Arizona Copper Co., Ltd.; J. E. Curry, secretary Arizona Chapter, American Mining Congress.

The plant of the Apache Powder Company is located on the San Pedro River, a short distance from the town of Benson, in Cochise County, and is in the final stages of its construction period. The moving spirit of the enterprise is Mr. Charles E. Mills, president of the company (formerly general manager of the Inspiration Consolidated Copper Co.), through whose unfaltering energies the plant has reached the near-completed stage after approximately

only ten months of actual work in construction. The direct charge of construction has been handled by the company's manager, W. W. Edwards, assisted by D. E. Fogg.

PHELPS DODGE CLOSES OFFICE.—Effective May 15 and to continue throughout the present copper depression, the Phelps Dodge Corporation closed its general manager's office at Douglas, Arizona. General Manager P. G. Beckett will spend a part of the summer and fall out of the state.

NANCY LEE CHANGES HEADQUARTERS.—At a recent meeting of the Nancy Lee Mining Company, operating a gold-silver property in Secret Pass, Arizona, it was decided to change headquarters of the company from Bisbee to Kingman, Arizona, in order to facilitate the dispatch of its business. Kingman is the railroad point for the mine, being twenty-three miles distant, and the center of mining activities in Mohave County. The new officers elected are John Olson, president and general manager; Fred T. Bragonier, vice-president, and Robert B. Manson, secretary and treasurer, who, with Senator Henry Lovin, Dr. Robert Ferguson and Mr. H. J. Hierl, compose the directorate.

EXODUS OF MEXICAN MINE LABORERS.—P. R. Mihes, former secretary to Governor Campbell, recently appointed state immigration commissioner, passed through Bisbee for Phoenix on his return from Nogales, where he had gone to arrange for the return to their homes in Mexico of several hundred unemployed Mexicans from the Salt River Valley who, during the cotton picking season, were employed by the farmers in the Phoenix and Tempe agricultural districts. These Mexicans were brought from Mexico into the farming districts by special permission of the U. S. Government.

The exodus of unemployed Mexicans from the mining districts began upon the closing down of the copper mines and smelters and has continued until these districts are almost deplete of this class of labor. It is expected these Mexicans will return to the copper camps and the cotton fields when both these industries, now in a bad way, show signs of revival.

ARIZONA PERSONALS.—P. G. Beckett, general manager Phelps Dodge Corporation, expects to spend a part of the present summer in the east—A. G. McGregor, construction engineer of Warren, Arizona, has recently sailed out of New York to visit the Cerro de Pasco mine in Peru, for which he is building a new smelter—H. Kenyon Burch, consulting engineer for the Phelps Dodge Corporation, who is constructing the new concentrating plant near Bisbee to treat the ores of Sacramento Hill, has recently returned to Bisbee from a trip of inspection to the Moctezuma Copper Co.'s plant at Nacozari and the Burro Mountain Branch of the P. D. Corporation, where work under his direction is under way—Robert E. Tally, general manager, United Verde Copper Co. at Jerome, and governor of the Arizona Chapter of the American Mining Congress, has returned to Jerome after a business trip to California points—John C. Greenway, general manager, Calumet & Arizona Mining Co. and New Cornelia Copper Company, has been spending a great deal of time in the field, including Mexico, in the interest of his companies—Arthur Notman, superintendent mine department, Copper Queen Branch, Phelps Dodge Corporation, left May 19 for a vacation of several months in the Adirondack mountains of New York.

WAR MINERALS BODY REDUCED.—Resignations of Philip N. Moore and John F. Shafroth of the War Minerals Relief Commission became effective May 20. Horace G. Pomeroy now has charge of pending appealed cases. The remainder of the organization consists of J. H. Means, chief engineer, a field auditor and a small clerical force. Work of the commission is practically at a standstill.

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The Bureau of Mines, follows:

INCOME	GASOLINE		
	1921	1920	1919
Stocks, January 1...	462,381,837	446,793,431	297,326,983
Production.....	1,268,416,081	1,026,445,532	898,535,505
Imports.....	9,540,679	8,575,464	6,048,918
Total.....	1,739,338,597	1,481,814,427	1,201,911,406

OUTGO	GASOLINE		
	1921	1920	1919
Exports.....	151,953,454	109,610,676	96,639,064
Shipments to insular possessions.....	9,230,954	3,190,434	3,048,527
Domestic Consumption.....	866,110,709	742,620,271	556,161,386
Stocks, March 31....	713,043,480	626,393,046	546,062,429
Total.....	1,740,338,597	1,481,814,427	1,201,911,406

INCOME	KEROSENE		
	1921	1920	1919
Stocks, January 1...	393,070,923	339,319,690	380,117,829
Production.....	537,704,423	581,589,901	492,973,977
Imports.....			
Total.....	930,775,346	920,909,591	873,091,806
OUTGO	KEROSENE		
	1921	1920	1919
Exports.....	209,222,292	233,782,442	184,740,900
Shipments to insular possessions.....	1,381,513	3,899,876	4,548,619
Domestic Consumption.....	273,804,353	348,610,156	389,124,664
Stocks, March 31....	446,367,188	334,617,117	294,677,623
Total.....	930,775,346	920,909,591	873,091,806

INCOME	GAS AND FUEL		
	1921	1920	1919
Stocks, January 1...	837,404,414	714,124,455	659,001,357
Production.....	2,327,561,136	1,894,185,976	1,718,257,965
Total.....	3,164,965,550	2,608,310,431	2,377,259,322
OUTGO	GAS AND FUEL		
	1921	1920	1919
Exports.....	*522,036,638	*389,020,315	*232,970,028
Shipments to insular possessions.....	26,809,808	25,801,407	26,250,840
Domestic Consumption.....	1,610,801,165	1,613,305,851	1,368,970,648
Stocks, March 31....	1,005,317,939	580,182,858	749,067,806
Total.....	3,164,965,550	2,608,310,431	2,377,259,322

*Includes fuel or bunker oil for vessels engaged in foreign trade: 1919, 2,017,955 barrels; 1920, 4,999,676 barrels; 1921, 6,441,231 barrels.

Total.....	391,866,641	369,259,615	336,725,254
OUTGO			
	1921	1920	1919
Exports.....	81,756,261	100,459,227	72,081,945
Shipments to insular possessions.....	1,698,006	1,567,046	556,588
Domestic Consumption.....	84,998,281	136,602,745	98,591,467
Stocks, March 31....	223,414,093	130,630,597	165,495,254
Total.....	391,866,641	369,259,615	336,725,254

NEARLY 1,000 APPLICATIONS FOR OIL PROSPECTING PERMITS

DURING the month of April the Geological Survey reported upon the structural relations of 905 applications for prospecting permits for oil under the leasing act, bringing the total number of such reports made since July 1, 1920, up to 5,500. Since the passage of the leasing act reports have been prepared upon 128 applications for coal prospecting permits, and 103 were awaiting action at the end of April. Thirty-two applications for coal leases have been reported upon.

Nearly 900,000 acres were classified during April under the stock raising homestead law and designated for entry, as follows: California, 311,490 acres; Michigan, 320; Montana, 273,710; Oklahoma, 27,390; Wyoming, 240,190. The total area of lands classified to date is now more than 100,000,000 acres.

More than 1,000,000 acres were included during the month in formal orders designating land for entry as enlarged homesteads. These areas were as follows: Colorado, 897,130 acres; Idaho, 32,838; Montana, 110,638.

THREE-SHIFT SYSTEM IN THE IRON AND STEEL INDUSTRY

THE INTERNATIONAL Labor Office is sending a questionnaire on "experience with the three-shift system in the iron and steel industry" to countries which are members of the League of Nations. Open hearth furnaces, Bessemer converters and rolling mills are included in the inquiry, and each will receive a copy of the questionnaire. The Taylor Society, New York, is circulating the questionnaires in this country.

The object of the inquiry is to determine the extent to which the three-shift system has displaced the two-shift plan and the effects of the change on output, costs and the conditions of the working men.

to so before the war. He expresses the opinion that as soon as the revenues and operating costs of the railroads can be brought to a proper relationship the problem now facing us will be largely, if not entirely, solved.

INCREASED OPERATING EXPENSES

In explaining the decrease in

Willard were emphatic in their statements that the labor cost was directly due to government action beyond the control of the carriers and out of all proportion to the increased rates. Mr. Kruttschnitt also illustrated many instances where the national agreements had worked out to the great financial disad-

ADVOCATES OF THE GENERAL LAND OFFICE.

DEAR MR. COMMISSIONER:

Section 19 of the act of February 25, 1920 (41 Stat., 437), gives to certain persons who had located or acquired placer mining claims and who are able to meet other requirements imposed in the law, a preference right to prospecting permits upon such locations "upon the same terms and conditions, and limitations as to acreage, as other permits provided for in this act."

The limitation as to acreage which may be included in a single permit is found in section 13—2,500 acres. There is no limitation in section 19 as to the number of permits which may be obtained by a qualified person or persons who held the placer mining claims and are able to meet the conditions of the act.

As an administrative matter and in harmony with the evident intent of the act to avoid monopoly, a regulation was embodied in the oil and gas regulations of October 29, 1920, page 37, to the effect that qualified assignees since October 1, 1919, may secure preference-right permits, "but no such transferee will be permitted to hold permits exceeding 2,500 acres for such lands in the same geological structure, nor more than three times that area in the same State."

While the intent of the act is to prevent monopoly, its primary purpose was to encourage prospecting for and development of the oil and gas resources of the United States. In localities remote from transportation, refineries, pipe lines, and sources of supply, it may be difficult to secure the exploration of a wild-cat territory if the person or corporation conducting the exploration and development is limited to a maximum of 2,500 acres. Moreover, as stated above, section 19 is a remedial section, designed to take care of equitable claims of those who had initiated claims under the placer mining laws prior to withdrawals or prior to the repeal of the general mining laws as applicable to oil and gas deposits, and consequently no limitation was made in the statute as to the number of such locations which might be surrendered and made the basis of prospecting permits. The limitation above quoted is one of regulation and expediency and not of statute. Therefore, having in mind the purpose of the act and the scope of section 19, it is held that for development purposes, assignments of prospecting permits secured under section 19 of the act, to a qualified individual, corporation or association outside producing oil and gas fields and in localities without transportation facilities, refineries, pipe lines, or nearby sources of supply, for not exceeding five such permits in a State and near enough to each other for common development, whether contiguous or noncontiguous, may be presented for the consideration of the Secretary of the Interior, and his approval if he shall find same to be in the public interest.

To the extent of its conflict with the foregoing, said regulation under section 19 of the act of February 25, 1920, is modified.

Respectfully,

ALBERT B. FALL,
Secretary.

Persons who filed applications before February 25, 1920, cannot be deprived of their rights because of their own delay even when the Interior Department later designates the lands as within known producing structures. Secretary Fall has issued the following upon this subject:

THE COMMISSIONER OF THE GENERAL LAND OFFICE

DEAR MR. COMMISSIONER:

Based upon rulings of the Secretary of the Interior, the regulations concerning oil and gas permits and leases approved October

WHY INDUSTRY LANGUISES

WHEN freight on mine supplies is almost five times as great as the cost of the supplies, prosperity cannot even be anticipated. It is worthy of note that such a situation not only exists, but also is so extraordinary as to call for mention in *Labor* a known geological structure of a producing oil or gas field."

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THE COMMITTEE on Mining Law Revision appointed by the director of the United States Bureau of Mines on January 23, 1917, has reported a bill of 5,000 words, codifying in one law "all of the existing laws relating to the location of mining claims on the public domain" and making amendments thereto "to comply with the consensus of opinion in the mining industry and to conform to present day conditions of mining." A full synopsis thereof will be printed in the bulletins issued by the American Mining Congress.

The report of the committee has been referred to the House Committee on Mines and Mining and to the Secretary of Interior. Some of the recommendations embodied in the code have already been made to Congress by the Interior Department.

NAVAL RESERVES TRANSFERRED—President Harding has signed an order transferring from the Navy Department to the Interior Department the administration of the naval oil and oil shale reserves. The order covers the two oil reserves in California, 68,249 acres; the oil reserve in Wyoming, 9,481 acres; the shale reserve in Colorado, 45,440 acres, and the shale reserve in Utah, 86,584 acres. The transfer was made pursuant to the President's policy of co-ordinating the work of the different departments.

GOLD ACTIVITY IN NORTHWEST ARIZONA

(Arizona Correspondence by J. E. CURRY, Secretary Arizona Chapter)

FOLLOWING CLOSE in the wake of the cessation of copper mining activities throughout the state, renewed interest in the development of some of the promising gold and silver districts of Arizona has been awakened. The most notable instance of recent activities is in that section of Northwestern Arizona (Mohave County) known as the Secret Pass and Union Pass districts, lying in the Black or River Range, approximately fifteen miles north of the town of Oatman, which for many years has been furnishing the major part of all the gold produced in the state. After lying idle for several years, the resumption of development of the Nancy Lee mine in Secret Pass is being followed with more than ordinary interest, since this property has always been regarded by those most familiar with the "signs and ear-marks" of the country as possessing attractive possibilities. The work at this property is being centered in a strong true-fissure vein of calcite-quartz, with adaluria, flurite and manganese oxide. A few miles distant from the Nancy Lee property in Secret Pass, another mining property (long idle) known as the Katherine has recently been opened up by its owners—the Sutro interests of San Francisco—to the 400-foot level, in which property it is said several million dollars in gold ore carrying a fine milling average has already been blocked out. It is understood that plans are being considered for the erection of a milling plant to be located a short distance from the Colorado River and the mine, to handle the Katherine ores.

It has been reported recently that the "Sunbeam," another promising property of this district, has recently been optioned to and examined by W. J. Loring of the Carson Hill Company, and president of the American Mining Congress.

Still another property—the Gold Chain—located between Secret Pass and the Katherine, has been attracting considerable notice and favorable comment, since its development has been under way the past two months, directed by a company of San Francisco gold operators. It is freely predicted that the Gold Chain may soon be in the "milling class." When it is considered that the two older operating mines (The Tom Reed and the United Eastern) lying just south of the Secret Pass—Union Pass districts, have furnished over 125,000 ounces of Arizona's 1919 gold production, and over 136,000 ounces of the 1920 production, it will be seen that the above mentioned new district lies "in an aristocratic neighborhood"—for the desert.

ARIZONA'S NEW EXPLOSIVE PLANT.—A meeting of the directors of the Apache Powder Company was held some time since at the company's office in Bisbee, Arizona, being attended by the following: T. H. O'Brien, general manager, Inspiration Consolidated Copper Co.; Thomas H. Collins, director, Calumet & Arizona Mining Co.; F. W. MacLennan, general manager, Miami Copper Co.; Norman Carmichael, general manager the Arizona Copper Co., Ltd.; J. E. Curry, secretary Arizona Chapter, American Mining Congress.

The plant of the Apache Powder Company is located on the San Pedro River, a short distance from the town of Benson, in Cochise County, and is in the final stages of its construction period. The moving spirit of the enterprise is Mr. Charles E. Mills, president of the company (formerly general manager of the Inspiration Consolidated Copper Co.), through whose unfaltering energies the plant has reached the near-completed stage after approximately

only ten months of actual work in construction. The direct charge of construction has been handled by the company's manager, W. W. Edwards, assisted by D. E. Fogg.

PHELPS DODGE CLOSES OFFICE.—Effective May 15 and to continue throughout the present copper depression, the Phelps Dodge Corporation closed its general manager's office at Douglas, Arizona. General Manager P. G. Beckett will spend a part of the summer and fall out of the state.

NANCY LEE CHANGES HEADQUARTERS.—At a recent meeting of the Nancy Lee Mining Company, operating a gold-silver property in Secret Pass, Arizona, it was decided to change headquarters of the company from Bisbee to Kingman, Arizona, in order to facilitate the dispatch of its business. Kingman is the railroad point for the mine, being twenty-three miles distant, and the center of mining activities in Mohave County. The new officers elected are John Olson, president and general manager; Fred T. Bragonier, vice-president, and Robert B. Manson, secretary and treasurer, who, with Senator Henry Lovin, Dr. Robert Ferguson and Mr. H. J. Hierl, compose the directorate.

EXODUS OF MEXICAN MINE LABORERS.—P. R. Milnes, former secretary to Governor Campbell, recently appointed state immigration commissioner, passed through Bisbee for Phoenix on his return from Nogales, where he had gone to arrange for the return to their homes in Mexico of several hundred unemployed Mexicans from the Salt River Valley who, during the cotton picking season, were employed by the farmers in the Phoenix and Tempe agricultural districts. These Mexicans were brought from Mexico into the farming districts by special permission of the U. S. Government.

The exodus of unemployed Mexicans from the mining districts began upon the closing down of the copper mines and smelters and has continued until these districts are almost deplete of this class of labor. It is expected these Mexicans will return to the copper camps and the cotton fields when both these industries, now in a bad way, show signs of revival.

ARIZONA PERSONALS.—P. G. Beckett, general manager Phelps Dodge Corporation, expects to spend a part of the present summer in the east—A. G. McGregor, construction engineer of Warren, Arizona, has recently sailed out of New York to visit the Cerro de Pasco mine in Peru, for which he is building a new smelter—H. Kenyon Burch, consulting engineer for the Phelps Dodge Corporation, who is constructing the new concentrating plant near Bisbee to treat the ores of Sacramento Hill, has recently returned to Bisbee from a trip of inspection to the Moctezuma Copper Co.' plant at Nacozari and the Burro Mountain Branch of the P. D. Corporation, where work under his direction is under way—Robert E. Tally, general manager, United Verde Copper Co. at Jerome, and governor of the Arizona Chapter of the American Mining Congress, has returned to Jerome after a business trip to California points—John C. Greenway, general manager, Calumet & Arizona Mining Co. and New Cornelia Copper Company, has been spending a great deal of time in the field, including Mexico, in the interest of his companies—Arthur Notman, superintendent mine department, Copper Queen Branch, Phelps Dodge Corporation, left May 19 for a vacation of several months in the Adirondack mountains of New York.

WAR MINERALS BODY REDUCED.—Resignations of Philip N. Moore and John F. Shafroth of the War Minerals Relief Commission became effective May 20. Horace G. Pomeroy now has charge of pending appealed cases. The remainder of the organization consists of J. H. Means, chief engineer, a field auditor and a small clerical force. Work of the commission is practically at a standstill.



RAILROAD EXECUTIVES ANSWER CHARGES OF INEFFICIENT MANAGEMENT

By C. H. FARRELL

THE SENATE COMMITTEE on Interstate Commerce has been conducting a general investigation into the railroad situation during the last two weeks, with a view to determining just what the difficulties are and to what extent they can be remedied.

Chairman Cummins opened the investigation by reading into the record a statement showing that while the operating revenues have increased since 1913, there has been a greater increase in operating expenses, so that for the year which ended on March 1, 1921, the net operating income of the carriers was only \$2,578,922 compared with \$787,610,435 in 1913. The ratio of operating expenses to operating revenues increased from 69 percent to 94 percent. "The problem before us is to try to ascertain whether the \$6,000,000,000 received as operating revenues for the year which ended on March 1 last was wisely, economically and effectively expended. If we cannot increase revenues we have about reached our limit and the expenses of the railroads of the country must be reduced if the railroads are to be successful." This is the announcement made by Chairman Cummins.

The railway executives announced on the eve of the hearing that they would go before the committee in the belief that the transportation crisis through which we are passing is not peculiar to the United States, but has grown out of world conditions chargeable, in most instances, to the war; that the worst part of the difficulty has been passed and that the Transportation Act has not broken down, is not responsible, and should be given a thorough trial. The carriers do not seek any amendment to existing law, and express regret that the situation is such that wages must be reduced. As to rates, the policy is said to be a desire to render economical and efficient service at a rate which will promote the movement of the largest possible amount of traffic, although the carriers feel that adequacy of facilities is of more importance to the shipping public than the amount of the rate. The carriers further contend that the abnormal expenses of 1920 were almost entirely beyond their control and that a large

part of them was forced by government action.

The first witness to be called was Julius Kruttschnitt, chairman of the board of directors of the Southern Pacific Company, and his testimony and cross examination consumed the first week of the inquiry. Daniel Willard, president of the Baltimore & Ohio Railroad, has occupied the stand during the balance of the hearings to date.

The attitude of these executives can be summed up under the following heads:

INCREASED RATES.—The present rates are not responsible for the great falling off in the movement of traffic and the public is being misled in that direction, because the cost of transporting commodities at the present time is far less than the toll taken by commission merchants and retailers for buying and selling the same commodities, and if lower rates would bring about increased traffic the carriers would, as a matter of good business, desire such rates. The reduction in traffic is laid at the door of general business conditions, which, it is said, would have come if there had been no advance in freight rates, and although the prices of commodities reached their maximum early in 1920 and fell with great rapidity up to the time the advanced rates took effect, the traffic itself did not drop until at least four months thereafter. The ocean situation is cited as proving this contention, for while at the present time ocean rates have reached the lowest point in their history, there is also an excessive supply of ships.

Mr. Kruttschnitt said that there were many commodities which could not move if all rates on them were abolished because there are no markets for the producers. The states of Arizona and Nevada were used as instances where no increased interstate rates were in effect but where the intrastate traffic declined 50 percent while the intrastate traffic in that same section declined 41 percent although it was paying the increased rates allowed by the commission. Taking the Texas cotton crop, Mr. Kruttschnitt showed that because of reductions in water rates the cost of ship-

ment from producing points to Liverpool had been reduced about \$1.28½ per 100 pounds, and in spite of this one-half million bales of cotton less than normal have been exported to Liverpool. The difficulty here is the absence of demand by both foreign and domestic purchasers. From the Imperial Valley of California about 54,000 bales of cotton remain unshipped, notwithstanding the fact that there is a rate through the Panama Canal as low as the rail rate available prior to the last increase in rail rates, and notwithstanding that the ocean rates across the Pacific and across the Atlantic have been reduced more than \$1 per 100 pounds. The exports of rice, salmon and dried fruit fell off more than 50 percent during September, October and November of last year, as compared with the previous year, although the reduction in ocean rates was substantially more than the increase in inland rail rates. Mr. Kruttschnitt stated that the troubles of the California lemon grower were not attributable to the freight rates, inasmuch as there was a rate by sea less than half of the rail rate, in spite of which the lemons remained in California, although during the months of November and December, 1920, and January and February, 1921, after the increase in freight rates, there were more lemons shipped than in the corresponding months of the previous year.

Mr. Kruttschnitt attributes the failure of the increased rates to produce sufficient revenue to the following: first, the action of the state railroad commissions in refusing to allow the intrastate rates to be raised to the level prescribed by the Interstate Commerce Commission for interstate rates; second, the depletion of railroad revenues by agencies created by the government and paid for by taxes to which the railroads themselves contributed largely, and to which agencies they lost traffic which the carriers themselves had created and fostered.

Mr. Willard expressed the opinion that in order to make private ownership a success it is not necessary to raise rates to levels which retard traffic and that it was not necessary to

do so before the war. He expresses the opinion that as soon as the revenues and operating costs of the railroads can be brought to a proper relationship the problem now facing us will be largely, if not entirely, solved.

INCREASED OPERATING EXPENSES.—In explaining the decrease in operating revenue in 1920 under 1919, of \$454,025,669, Mr. Kruttschnitt called attention to the fact that while the increase in operating revenues was \$1,041,338,541, the increase in operating expenses, taxes and rents, was \$1,495,364,210. This large increase in expenses was attributed almost entirely to increased labor costs and the payment for materials and supplies at prices fixed during federal control and contracted for by the government. It was said that 64 cents out of every dollar of operating expenses during 1920 went to labor at wages fixed by the government; 30 cents was paid for materials and supplies, at least one-half of which was purchased at prices fixed by the government during federal control; 3½ cents went to operating expenses other than for labor, material and supplies for the first two months of 1920 during which time federal control was in effect, making a total of 82.5 cents out of every dollar paid for expenses at prices directly fixed by the government. The remaining 15 cents paid for materials and supplies was at prices fixed by general market conditions over which the carriers had no control, making a total of 97.5 cents out of every dollar of operating expenses spent by the carriers during 1920, an item which cannot be charged to inefficiency or bad management because the carriers could not in any way influence it.

LABOR CONDITIONS.—Passing to the question of labor, Mr. Kruttschnitt stated that there cannot be any proper dissent from the statement that by far the largest contributing cause of the abnormal amount of railroad operating expenses is the cost of labor. He divides this cost into direct and indirect classes, the direct being that paid directly to labor and the indirect that paid to labor in the increased cost of materials and supplies. During 1916, prior to the Adamson law, the carriers' labor bill was \$1,468,576,934. There was a substantial increase in 1917 due to the Adamson law, a subsequent increase in 1918 made by the Railroad Administration, a further increase in 1919 by the same agency, and a final increase in 1920 by the Labor Board, raising the total labor bill for 1920 to \$3,698,216,351, an increase over 1916 of \$2,229,639,957, and an increase over 1917 of \$1,958,734,209. The increase made by the Railroad Labor Board in 1920 was not in force during the whole year, but if it had been there would have been a further increase which is estimated at about \$280,000,000. The actual increase for 1920 in the labor bill was 115 percent, and would have been 128 percent if the increased scale had been in effect during the entire year. During this period the gross revenues of the carriers increased less than 54 percent. Both Mr. Kruttschnitt and Mr.

Willard were emphatic in their statements that the labor cost was directly due to government action beyond the control of the carriers and out of all proportion to the increased rates. Mr. Kruttschnitt also illustrated many instances where the national agreements had worked out to the great financial disadvantage of the carriers, and the readers of this page are familiar with many of those instances.

EFFICIENCY.—The carriers believe that during the period since the termination of federal control the efficiency of private management has been amply illustrated, and Mr. Willard called attention to the fact that during 1920 the carriers handled nine billion net tons more than they ever handled before in the same length of time, in spite of the conditions which prevailed at the termination of federal control. The tonnage was the largest in the history of the carriers, and Mr. Willard cited figures to show that the increases in expenses over 1919 were not out of line with the increased service performed, and further contends that they prove that there was a measure of economy. As to the efficiency of private management, Mr. Kruttschnitt said that the carriers handled the increased traffic of 1920 with fewer train miles than were used in 1918 to carry the smaller traffic of that year. The loaded car mileage was said to have been greater in 1920 than in 1918 or 1919, and the empty car movement was also in excess of those years. The revenue tons carried per freight train were greater in 1920 than in any previous year, and the miles run per freight car per day were greater in 1920 than in 1919 and the same as in 1918, while the average number of tons per loaded freight car was greater in 1920 than in either of the previous three years.

This inquiry will be continued indefinitely and all parties concerned, including the carriers, labor unions, security holders and shippers, will be given an opportunity to testify.

MINES USE RECORD QUANTITY OF EXPLOSIVES

MORE THAN 90 PERCENT of all explosives manufactured in the United States last year were used by the mines, according to Bureau of Mines calculations. Total consumption by the mines was 9,137,728 kegs out of 10,195,193 manufactured, or 48,972,715 pounds out of 53,962,841 pounds of permissible explosives and 126,405,571 pounds out of 229,112,084 pounds of high explosives other than permissible.

Production of explosives for the year was 29 percent greater than that of 1919. All classes of consumers used larger quantities, but the principal increase was in coal mining, which ordinarily consumes 80 percent of all black powder and permissible explosives produced and 15 percent of high explosives.

WHY INDUSTRY LANGUISES

WHEN freight on mine supplies is almost five times as great as the cost of the supplies, prosperity cannot even be anticipated. It is worthy of note that such a situation not only exists, but also is so extraordinary as to call for mention in *Labor*, a weekly published in Washington, D. C., and known as an advocate of the Plumb Plan and similar devices. A communication to the editor of *Labor*, is reproduced herewith:

To the Editor of *LABOR*:

A friend who happens to be in the lumber business gave us one great big reason why some of the big mines in the State of Arizona are closing. Note the figures as to the cost of a carload of lumber purchased in Oregon and shipped for the use of one of the big mines of the state:

Freight.....	\$865.40
War tax.....	25.96
Total.....	\$891.36
Timber cost at mills.....	187.40

Did you ever hear of anything more eloquent than the above figures?

HENRY STEVENSON.

Miami, Ariz.

THE HIGH COST OF STRIKES

AN ANALYSIS of strike movements in mining, iron and metal industries in the principal countries of the world during the first six months of 1920 has been made by the ASSOCIATED INDUSTRIES OF AMERICA (Butte, Mont.). It shows that countries which claim the most advanced welfare arrangements had the most strikes, and the advantage gained by strikers was small in proportion to wage loss. Two-thirds of the strikes were lost completely by the men, and only in one-third were the strikers more or less successful. This association's summary follows:

Countries	Persons Involved	Lost Working Days
Germany.....	985,350	8,896,600
Australia.....	300,000	7,300,000
France.....	502,000	7,027,400
United States.....	395,000	5,895,000
Sweden.....	167,600	4,506,450
Italy.....	181,650	3,299,700
Great Britain.....	235,040	1,761,600
Belgium.....	67,000	1,078,400
Spain.....	81,900	875,000
South Africa.....	40,000	800,000
Austria.....	52,100	275,200
Switzerland.....	1,190	18,300
Total.....	3,008,930	41,623,650

GEOLOGICAL SURVEY NOTES

STRATIGRAPHIC STUDIES for oil and gas work in Wyoming were begun the second week in May by W. T. Lee. W. T. Thom, Jr., left Washington May 9 for Miles City, Mont., where he joined C. E. Dobbin in work on coal classification and studies of structure in Garfield County, Mont. A topographic survey of the Cold Bay oil field, southwestern Alaska, will be made by R. K. Lynt, who sailed from Seattle two weeks ago. C. E. Siebenthal spent several days making geologic investigations in the Joplin district. An investigation of the ground-water resources of the Mud Lake region, Idaho, was started a week ago by O. E. Meinzer.

GROWING INDUSTRY NEEDS TARIFF PROTECTION

NINE COMPANIES have either built or contemplate building plants which will increase the talc grinding capacity of the country by 500 tons per day, or approximately 150,000 tons per year, according to a survey of the field by Raymond B. Ladoo, mineral technologist of the Bureau of Mines. Of this amount, 235 tons per day capacity has already been built, 85 tons is nearing completion, and 180 tons is contemplated.

The estimated total consumption of 1920, which was the maximum year, was 237,000 tons, or 790 tons per day. Of this amount 24,000 tons was imported. The domestic production therefore was approximately 213,000 tons, or 710 tons per day. The Bureau of Mines makes the statement officially that, "Unless a high protective tariff on talc is enacted, imports will increase rather than decrease."

LARGE COAL DEPOSITS IN SAN JUAN COUNTY, NEW MEXICO

TWO DISTINCT FORMATIONS in San Juan County, New Mexico, contain coal beds, according to a report of a survey made by C. M. Bauer and J. B. Reeside, Jr., of the United States Geological Survey. The formations extend into the adjacent part of Colorado. In some places, such as Durango, Colorado, and Gallup, New Mexico, mining has continued for many years, but in much of the basin the coal is practically untouched, and little was known regarding the exact distribution and value of the beds until the survey was made by Messrs. Bauer and Reeside.

The older formation in San Juan County extends diagonally across the western and middle parts. The younger formation make a great curve from the north side of the county through the center to its southeast corner, and it is estimated to contain ten billion tons of workable beds at depths less than 1,000 feet beneath the surface. It is believed that there is even a larger supply between one and two thousand feet. Messrs. Bauer and Reeside believe that these beds, together with those below 2,000 feet and those of the older formation, contain an amazingly large amount of coal.

It is pointed out that lack of shipping facilities and strong competition make extensive development in the near future improbable, but it is shown that there is an immense reserve of fuel for the future.

RESCUE CAR AT CHICAGO PAGEANT

ONE of the interesting exhibits at the "Pageant of Progress" to be given in Chicago during the coming summer will be a rescue car operated by the United States Bureau of Mines. M. H. Leopold, safety engineer of the bureau, has announced that one of the cars will be a feature of the government exhibit.

ANALYSES OF IOWA COALS

THE FIRST OF A SERIES of bulletins relating to the quality of coal of the different states has been issued by the Bureau of Mines. It is entitled "Analyses of Iowa Coals" and was prepared by George S. Rice, A. C. Fieldner and F. D. Osgood. It contains data regarding analysis and heating qualities of coal mined in the various counties of the state.

Coal was mined in Iowa during the first half of the nineteenth century, but only in a small way. The earliest reliable production record was for the year 1840, in which the output amounted to 400 tons. In 1860 it had gone to 42,000 tons; in 1880 to 1,461,000 tons; in 1900 to 5,203,000 tons, and in 1917 to 8,966,000 tons. Increases in output would have been more rapid if the coal beds had been thicker and more regular.

It is believed that the original coal supply in Iowa was 29,160,000,000 short tons and that in 1910 about 28,900,000,000 tons was still available. Including the output of 1918, there has since been mined 60,000,000 tons.

Because of the irregularities of the coal beds, the life of the average Iowa mine does not exceed twelve years.

Iowa coals are used for domestic purposes, locomotive and power houses. Markets for the Iowa product are principally local, although shipments are made into eastern Nebraska, where shipments from Colorado offer local competition.

"The development of the coal and the output will probably continue to rise slowly with the industrial growth of the state, but no marked increase in the annual production is possible," the report says. Heretofore little has been done to improve the quality of Iowa coal except hand picking and culling at the point of loading. Much could be done to improve the coarse coal by more adequate picking tables, and to improve the small coal by building washeries at central points where mines are short lived.

EXTENSIVE SURVEY OF OKLAHOMA OIL FIELD COMPLETED

IN THE HEWITT, Oklahoma, oil field, the Bureau of Mines has just completed the most extensive engineering survey and report of a particular oil field which it has ever made. T. E. Swigart and F. X. Schwarzenbek, engineers of the Bureau, spent seven months in the field, and oil operators through the Ardmore Chamber of Commerce contributed \$1,000 to expansion of the survey.

The report of the survey is being distributed by the Ardmore Chamber of Commerce. It contains 170 pages, including forty-one illustrations. The subject matter deals with subsurface geology, engineering work as applied to oil field development, drilling and producing methods, curves for estimating future production and contributions from outside engineers on special subjects. The chamber of commerce financed the publication in order to avoid the delay incident to publication by the government.

ADVERTISING WESTERN MINE RESOURCES

THE NATIONAL EXPOSITION of mines and mining, to be held in connection with the Twenty-fourth Annual Convention of the American Mining Congress in Chicago, has found great favor among western editors. The *Mohave County Miner* of Kingman, Arizona, for instance, in an editorial entitled "Advertising Mineral Resources" urged Arizona and other states to put forth their best efforts in this direction. This editorial, because of its more than usual interest, is herewith reproduced in full:

"Nevada claims to have 500 varieties of mineral, while there are but 800 known minerals in the world. The same thing may be said of Arizona, this state having practically every mineral that is known or that has been made useful to mankind. But these two states have been rather lax in failing to make known to the world their wonderful mineral resources. While the American Mining Congress, at its session next October, in Chicago, expects to bring to public as many minerals from the various states as possible, it is not believable that the collectors will be able to secure the many specimens of rare minerals unless the mining public awakens to the importance of this exhibit. There should be no rivalry among the mining states over the proposed mineral exhibits, but each state should take measure of the importance of getting every known mineral into the hands of the collectors as soon as possible, and facts and figures of the productive possibilities of each metal should also be set forth. While Nevada and Colorado, as well as many other states, have passed the peak of their production, Arizona has hardly been scratched. Copper mines, as well as gold, silver, lead and zinc, are to be found in every part of the state, untouched by pick or drill, and these mines will be the producers of the tomorrow. To show to the world that these states still have potential mineral resources that have not been developed should be the aim of each of the states and the groups of mineral bearing counties. A small sum spent by the counties in the gatherings of statistics and minerals will bring much benefit to the various sections, especially where these great interests are dormant and undeveloped."

RETAIL COAL PRICE REPORTS

ACCURATE monthly reports of retail coal prices are expected to be issued soon by the Department of Commerce, working in co-operation with the Department of Labor. The reports are included in the plan for making public statistics on the cost of living much earlier than they have heretofore been published.

SURVEY ENGINEERS SUED

A DAMAGE SUIT for \$25,000 against N. C. Grover, John C. Hoyt, C. C. Stevens, and R. W. Davenport, engineers of the Geological Survey, for adversely reporting on his plan for development of water for power purposes in the Potomac River above Great Falls, Va., has been filed in the District of Columbia court by J. H. Levering, a hydraulic engineer. Levering charges that the basis for rejection of his plans was that they competed with plans of the government engineers.



THE EMERGENCY TARIFF, the Immigration, and the Army and Navy appropriation bills have taken the spotlight in the House and Senate during the month. The Emergency Tariff Bill produced an enormous amount of argument, which gives a fair idea as to what we may expect when the general tariff bill is presented.

The Immigration Bill as passed is almost identical with the bill passed last session, which was killed by President Wilson's pocket veto. Most of the Democratic members of the Senate were violently opposed to the bill and speech after speech was made against the policy of restriction. However, the Republicans triumphed, many making brilliant speeches in favor of the bill.

Whether we shall have a large army or have no army at all; whether we shall have the most powerful navy in the world or whether we shall completely disarm, were points which were fought with much bitterness and oratory, in the appropriation bills. The House finally decided that an army of 150,000 was sufficient, but the Senate committee on military affairs has recommended increasing this estimate by some 20,000 men.

The introduction of the bill, by Senator Kenyon, which will create a department of public welfare, is exceedingly important as this measure abolishes five branches of the government, including the Bureau of War Risk Insurance. The plan for government reorganization is being taken very seriously, Senator Kenyon's bill being one of the first efforts in this direction. Already there have been introduced two reclassification bills, and the McCormick Budget Bill has passed the House and Senate, and has gone to the White House for signature. The resolution by Senator Smoot providing for the appointment by President Harding of a seventh member of the joint committee on reorganization also has passed the House and Senate and Senator Johnson has introduced a bill providing for a minimum wage for all government employees.

The Farmers' Co-operative Marketing Bill has been passed by the House and sent to the Senate. The bill authorizes the formation of associations for collective marketing with immunity under the Sherman Anti-Trust Law.

The Ways and Means Committee of the

House has been working diligently on the tariff schedules and the Senate Finance Committee has started its hearing on revenue tax legislation. These hearings have been confined almost wholly to the abolishment of the excess profits tax and the introduction of the sales tax plan, with particular reference to Senator Smoot's proposal for the establishment of the sales tax.

Considerable interest has centered around the Senate Interstate Commerce Committee, which has been considering the coal bills, in regard to the Federal Control Act, a Federal Coal Commissioner, and the Seasonal Rates. The latter two bills have been favorably reported from the committee. H. R. 824 (Federal Coal Commissioner), which was reviewed in last month's JOURNAL, has now been merged into Senate 1807, which is reviewed in this issue and S. 41 (Seasonal Rates), reviewed in the May issue of the MINING CONGRESS JOURNAL, has been merged into S. 1806, which is now known as the Coal Stabilization Bill and has been reported favorably from committee. Senator Frelinghuysen in reporting the bill said that its object is to direct the Department of Commerce and the Bureau of Mines to make a careful study of all conditions pertaining to the coal industry in order that the government may assist in the stabilization of the industry. He insisted that its object was not interference but that the government would act in a co-operative and advisory manner.

Several bills have been introduced suspending annual assessment work on mining claims. Senator King's bill would exempt mining claims from doing assessment work until July, 1923; Representative Hudspeth would relieve the claim owners for the year 1920 and 1921; Senator Burson's Bill exempts for the years 1921 and 1922; Senator Pittman had the Senate pass a bill at the last session, changing the period of assessment work from the calendar to the fiscal year but has asked for a reconsideration and the bill was referred back to the Committee on Mines and Mining for the purpose of having 1920 assessment work extended until 1922.

The coming month bids fair to be a lively one in interest of the mining industry. It is expected that progress will be made on the tariff, revenue and coal bills. The MINING

CONGRESS JOURNAL will give complete résumés of all legislation introduced. The following bills will be of interest to the industry.

COAL

S. 1806. Introduced by MR. FRELINGHUYSEN. The seasonal coal freight rate bill formerly S. 41, reviewed in May issue, was favorably reported from the Senate Committee on Interstate Commerce on May 14. As amended it reads as follows:

"In order to promote continuous operation of coal mines, steady employment of coal miners and economical use of facilities for distribution of coal, the commission is hereby authorized to initiate, establish, approve or adjust rates for the transportation of coal during specified seasons or periods which shall be greater or less than the rates for other specified seasons or periods but which in the judgment of the commission will yield as nearly as may be the same annual revenue for like movement as rates without seasonal variation, to be maintained by carriers as a whole or as a whole in each of such coal rate groups or territories as the commission may from time to time designate for that purpose, or by such carrier or carriers as the commission may designate. The term "coal" shall include anthracite and bituminous coal, lignite, coke, including petroleum coke, and briquettes and boulets made from anthracite and bituminous coal and from coke. Whenever the commission is of opinion that an emergency affecting the transportation of coal and requiring immediate action exists in any section of the country the commission shall have, and is hereby given, authority, either upon complaint or upon its own initiative without complaint, at once if it so orders without answer or other formal pleading by the interested carrier or carriers, to suspend the operation of any schedule in so far as it affects coal rates, whether seasonal or not, upon filing with such schedule and delivering to the carrier or carriers affected thereby a statement in writing of its reasons for such suspension, and defer the use of such coal rates, and to initiate in lieu thereof such seasonal rates for the transportation of coal as in its judgment the emergency may require. The commission shall thereupon enter upon a hearing concerning the lawfulness of the schedule, the operation of which

TOTAL BILLS INTRODUCED THIS SESSION: 8314

GOLD:

- H.R. 5025: Mr. McFadden (Excise Tax)
 H.R. 4100: Mr. Raker (California Debris Commission)
 H.R. 5513: Mr. Husted (National Monetary Commission)
 H.R. 2182: Mr. MacGregor (Interchangeable value gold and silver throughout world)

COAL:

- S. 1806 (Formerly S. 41) Mr. Frelingheysen (Seasonal Coal rate)
 S. 1807: (Formerly S. 824) Mr. Frelingheysen (Federal Coal Commissioner)
 H. Res. 41: Mr. Lampert (Survey Coal Lands in U. S.)
 H.R. 2504: Mr. Butler (Fuel for Navy)

TARIFF:

- H.R. 5523: Mr. Rhodes (Cobalt)
 H.R. 3182: Mr. Ten Eyck (Tariff Commission)
 S. 25: Mr. Poindexter (Tariff Commission)

REVENUE:

- S. 233: Mr. Pittman (Amending Revenue Act, exemption gold, silver)
 H.R. 6039: Mr. Conooly (Amending Section 213)
 H.J. Res. 59: Mr. Fess (Committee to Review Tax System)

ASSESSMENT WORK:

- S.J. Res 32: Mr. Bursum (Suspension 1921-1922)
 H.J. Res 99: Mr. Hudspeth (Suspension 1920-1921)
 H.R. 2919: Mr. Sutherland (Annual labor claims in Alaska)
 S. 231: Mr. Pittman (Changing Date for Assessment work)

PUBLIC LANDS:

- S. 999: Mr. Harrison (Patent to mining claims)
 H.R. 4812: Mr. Hayden (Copper at depth)
 S. 563: Mr. Harrison (Amendment Leasing Bill)
 H.J. Res. 38: Mr. Barbour (Amendment Leasing Bill)
 S. 479: Mr. Smoot (Boron Deposits)

LABOR:

- S. 408: Mr. Kenyon (Department Social Welfare)
 S. 681: Mr. Kenyon (National Employment Service)
 H.J. Res. 3: Mr. Black (Railroad Wages)
 S. 1673: Mr. Sheppard (Interstate Cooperative Asso.)

WAR MINERALS:

- S. 1364: Mr. Robinson (Liberalization)
 Mr. Shortridge (Favorably reported from Committee)

BLUE SKY:

- H.R. 2352: Mr. Taylor of Colorado (Federal Stock Act)
 S. 1612: Mr. Capper (Federal Trade Commission)

ANTI-TRUST:

- S. 550: Mr. Harrison (Amending Sherman Law)
 H.R. 2373: Mr. Volstead (Asso. Agricultural Producers)

INTERSTATE COMMERCE:

- S. 16:
 S. 690:
 S. 552:
 S. 621:
 S. 15:
 S. 922:
 H.R. 2409:
 H.J. Res. 4:
- Amending Laws pertaining to Interstate Commerce.

IMMIGRATION:

- H.R. 4075: Mr. Johnson (Passed House and Senate)

GOVERNMENT DEPARTMENTS:

- S. 551: Mr. Harrison (Western Branch Interior Dept.)
 S. 230: Mr. Pittman (Division Mines and Geology)
 S. 1607: Mr. Kenyon (Dept. Public Welfare)

OIL:

- S. 323: Mr. McKellar (Oil lands foreign Governments)
 H.J. Res. 10: Mr. Gallivan (Oil lands foreign Governments).

had been so suspended, and the proceedings thereon shall be the same as nearly as may be as those provided in paragraph (7) of section 15. Nothing contained in this paragraph shall be construed as repealing, modifying, or denying any other authority heretofore conferred upon the commission."

S. 1807. Introduced by Mr. FRELINGHUYSEN; formerly S. 824, reviewed in May issue; referred to the Committee on Interstate Commerce. This bill was favorably reported from the Senate Committee on Interstate Commerce on May 14, in which committee it was amended. It is expected that modification of the bill will be decided upon at a conference with the coal interests. The bill as reported places the administration entirely within the Commerce Department. Officials of the Bureau of Mines and Commerce Department prefer that the authority be divided between them.

The bill as amended provides that in case of an emergency and whenever necessary in the judgment of the President, upon proclamation of the President, the Secretary of Commerce is directed to investigate costs and profits in connection with the mining, sale, storage, and distribution of coal;

To investigate labor conditions, including wages, working conditions, and practices,

terms of employment, and the living expenses of miners;

To investigate the practicability of a statutory zoning system defining the distance from the mine in which coal may be transported in commerce and requires a report relative to the same by December 5, 1921.

The bill authorizes the Director of the Bureau of Mines, under the direction of the Secretary of the Interior, to investigate the methods and processes for the storage, inspection, sampling, analysis, purchase, classification, and economical utilization of coal, with a view to determine the most efficient means for coal storage, and to obtain information relative to the processes involved in the preparation, transportation, and utilization of coal.

The Director of the Bureau of Mines, under the direction of the Secretary of the Interior is to investigate the practicability of prescribing standards for the various kinds and grades of coal and requires a report relative to the same by December 5, 1921.

The Secretary of Commerce and the Director of the Bureau of Mines are required to submit annual reports setting forth the work and activities of their offices, together with such recommendations as they may desire to make for further legislation relating to the

mining, distribution, transportation, or sale of coal.

The Director of the Bureau of Mines, with the approval of the Secretary of the Interior and the Secretary of Commerce is to make all rules and regulations necessary for the enforcement of this bill.

H. Res. 41. Introduced by Mr. LAMPERT; referred to the Committee on Interstate and Foreign Commerce. (Survey of Coal Lands.) This resolution provides that the Federal Trade Commission be directed to make a survey of all coal-bearing lands in the United States and its possessions, to ascertain the present value of all coal lands and coal mines, including the machinery and other equipment used in mining such coal, and to report to the House of Representatives at as early a date as practicable, and not later than December 1, 1921. There shall be appropriated the sum of \$50,000 for carrying out the purposes of the resolution.

H. R. 2504. Introduced by Mr. BUTLER; referred to the Committee on Naval Affairs. (Navy Coal). The bill provides that until June 30, 1922, the President is authorized to requisition fuel necessary to the maintenance of the Navy, and to requisition facilities for

handling and storing such fuel; and he shall ascertain and pay a just compensation therefor. If the compensation is not satisfactory to the person receiving the same, they shall be paid 75 percent of the amount determined by the President, and will be entitled to sue the United States to recover any further sum as, added to the 75 percent, will make up such amount as will be just compensation for the property so requisitioned, and jurisdiction is conferred on the United States district courts to hear and determine all such controversies. Nothing in the act shall be construed to require any natural person to furnish to the government any fuel held by him and reasonably required for consumption or use by himself and dependents.

TARIFF

H. R. 5523. Introduced by MR. RHODES; referred to the Committee on Ways and Means. (*Cobalt.*) The bill provides that upon the passage of this act there shall be imposed, levied, collected, and paid upon the following articles named, when imported from any foreign country into the United States or into any of its possessions the tariff duties which are herein prescribed upon the cobalt content of all cobalt-bearing ores, concentrates, mattes, speisses, and all mixtures and combinations of the same, ten cents per pound; upon the cobalt content of all cobalt oxide of, cobalt sulphate, cobalt carbonate, cobalt acetate, cobalt chloride, cobalt hydrate, cobalt nitrate, cobalt linoleate, cobalt resinate, cobalt tungate, etc., and all cobalt alloys of which cobalt is a component part, \$1 per pound; and upon all other chemicals, compounds, and mixtures a tariff of 33½ percent ad valorem on the cobalt content contained therein shall be imposed.

H. R. 3182. Introduced by MR. TEN Eyck; referred to the Committee on Ways and Means. (*Adjustment duties by Tariff Commission.*) The bill provides that whenever and as often as the Tariff Commission, after hearing, on a complaint, finds that in the case of any article there exists a condition of competition of foreign industries with those of the United States whereby producers in the United States are placed at an unfair disadvantage as compared with foreign producers, and additional revenue is needed, and that such condition is facilitated by the then existing rate of duty or absence of duty on such articles, it shall certify to the Secretary of the Treasury, a rate of duty on such article which it finds would remove such unfair disadvantage and within sixty days after the certification the rate of duty on such articles shall be specified in the certificate. It also provides that when the Tariff Commission shall find that in the case of any article there exists any trust, combination, association or arrangement among producers or dealers whereby the price of the article is unduly enhanced, it shall also certify to the Secretary of the Treasury the rate of duty on such article which it finds would remove such undue

enhancement. In ascertaining the existence of the condition of competition, the commission shall take into account the cost of production of the article at home and abroad with special reference to prices paid labor, raw materials, producers' prices and retail prices.

S. 25. Introduced by MR. POINDEXTER; referred to the Committee on Finance. (*Enlarging the duties of the Tariff Commission.*) The bill makes it the duty of the commission to ascertain as nearly as possible such facts and information concerning the production and manufacture of articles of trade in this country and foreign countries as will enable it to determine the comparative cost of production and manufacture of the same in this country and abroad. It shall also ascertain such other facts as the conditions of production and manufacture, including the amount consumed, the amount produced, and the amount imported into this country, what rate of import duty would place the domestic and foreign producer and manufacturer upon an equal competitive basis. When the commission shall decide upon a rate for any article, it shall issue an order declaring the amount thereof and such amount is fixed as the rate of import duty upon such article. The commission shall at all times avoid sudden and extensive changes which will unsettle the general business of the country, it being the intention of the act that such changes shall be made by degrees, so as to adjust tariff rates to the principle of just protection and fair competition and to keep the same adjusted from time to time according to changing conditions of trade and industry.

REVENUE

H. J. Res. 59. Introduced by MR. FESS; referred to the Committee on Ways and Means. (*Reviewing Federal Tax System.*) The resolution authorizes the President to appoint a commission consisting of eleven members, three from the Senate and three from the House of Representatives and five additional members to be selected outside of Congress, whose duty it will be to consider the subject of taxation and report their findings and recommendations not later than July 1, 1921. Provisions are made covering the actual traveling expenses of the members of the commission while engaged upon the work of the said commission. The sum of \$25,000 is appropriated to meet the expenses of the commission.

H. R. 6039. Introduced by MR. CONNOLLY; referred to the Committee on Ways and Means. The bill amends the act entitled "An Act to provide revenue, and for other purposes," approved February 24, 1919, by adding after paragraph 8 of section 213 the following: That so much of the amount received by an individual as dividends or interest from domestic building and loan associations, organized and operated exclusively for the mutual benefit of their members'

as does not exceed \$500. Income received from matured shares of building and loan association stock assigned as collateral for mortgage or stock loans on which no cash payments have been made.

S. 233. Introduced by MR. PITTMAN; referred to the Committee on Finance. (*Amending Revenue Act of 1918.*) This bill provides that subdivision C of section 304 of the Revenue Act of 1918, approved February 24, 1919, be amended to read as follows: In the case of any corporation engaged in the mining of gold, or in the mining, milling, or reduction of silver, the portion of the net income derived from the mining of gold or silver imposed by this title, and the tax on the remaining portion of the net income shall be the proportion of a tax computed without the benefit of this subdivision which such remaining portion of the net income bears to the entire income.

H. R. 4100. Introduced by MR. RAKER; referred to the Committee on Appropriations. The bill provides for the appropriation of \$200,000 to carry out the provisions of an act entitled "An Act to create the *California Debris Commission* and regulate hydraulic mining in the State of California," approved March 1, 1893.

H. R. 5513. Introduced by MR. HUSTED; referred to the Committee on Banking and Currency. (*Creating a national monetary commission.*) The bill creates a commission to be known as the second national monetary commission, who shall at the earliest date practicable inquire into and report to Congress what changes are necessary and desirable in the monetary system of the United States and especially to the end that the purchasing power of the dollar may be stabilized.

H. R. 2182. Introduced by MR. MACGREGOR; referred to the Committee on Coinage, Weights, and Measures. The bill attempts to establish a gold currency and a silvery currency on a basis of inter-changeable value throughout the world.

PUBLIC LANDS

S. 999. Introduced by MR. HARRISON (for Mr. King); referred to the Committee on Public Lands. (*Patent to mining claims.*) The bill repeals sections 2325 and 2326 of the revised statutes and in lieu of same provides that any person or association authorized to locate a claim shall prepare a statement under oath showing such compliance, together with a plat and filed notes of the claim, showing accurately the boundaries of the claim, together with application for patent. A copy of such plat, together with a notice of application for the patent shall be posted in a conspicuous place on the land embraced in the plat and there shall be filed a copy of such statement, plat, and application for patent together with an affidavit of at least two persons that notice has been posted, and a copy

of the notice in the proper land office, and in a court of competent jurisdiction as and for a complaint or declaration, setting forth that he has located certain claims described in the complaint and set forth in the plat attached to such complaint and that he has performed all the acts necessary to entitle the claimant to a patent. Service of a summons or order to show cause shall then be made upon the register of the proper land office and upon all persons shown by the records of the land office to have made any entry which may conflict with the said claim and upon all other persons who may be actually claiming possession of the land. The register of the land office shall then make such answer and take such steps as he may be advised to protect the interests of the United States in such proceedings, and if such lands are not open to entry, provisions of the law not complied with, or there is any other reason why the claimant is not entitled to a patent, it shall be the duty of the Commissioner of the General Land Office to set up such matters as defenses by answer or pleading on behalf of the United States, denying that the claimant is entitled to a patent and the commissioner shall appear, or be represented, at the trial of said cause in behalf of the United States. After notice of application for patent has been published for sixty days, the court shall appoint a day for the hearing of the proceeding, at which time the applicant shall present proof of his compliance with the law as relating to location and improvement of claim, etc. If there are, at the time of the hearing, adverse claims to possession, the court shall determine the right of possession as between the adverse claimants and make its decision in the premises, which shall be a finding of the necessary facts and a judgment as to whether or not the applicant is entitled to patent. Section 2326 provides that after finding and judgment have been made, the party entitled to have patent to the claim, may without giving further notice, file a certified copy of the judgment roll with the land office and shall pay to the receiver \$5 per acre for his claim, together with the proper fees and a patent shall be issued for the claim. If it appears from the decision of the court that several parties are entitled to different portions of the claim, each party may pay for his portion of the claim and file the description with the surveyor general and patents shall be issued to the several parties according to their respective rights. Nothing shall be construed to prevent the alienation of a title conveyed by a patent for a mining claim to any person whatsoever.

ANNUAL ASSESSMENT

S. J. Res. 32. Introduced by MR. BURSUM; referred to the Committee on Mines and Mining. (*Suspension annual assessment work for 1921 and 1922.*) The provisions of section 2324 of the Revised Statutes of the United States, which requires on each mining claim located and until a patent has been issued, not less than \$100 worth of labor to be performed, or improvements aggregating such amount to be made each year shall be suspended as to

all mining claims in the United States including Alaska, during the calendar years of 1921 and 1922, provided that every claimant of any such mining claim, in order to obtain the benefits of this resolution, shall file or cause to be filed in the office where the location notice or certificate is recorded on or before December 31, 1921, and notice of his desire to hold said mining claim under this resolution.

H. J. Res. 99. Introduced by MR. HUDSPETH; referred to the Committee on Mines and Mining. (*Suspension requirements of annual assessment work on claims during 1920 and 1921.*) The bill provides that section 2324 of the Revised Statutes of the United States, which requires on each mining claim located and until a patent has been issued therefor not less than \$100 worth of labor to be performed, or improvements aggregating such amount to be made each year, be suspended as to all mining claims in the United States, including Alaska, during the calendar years of 1920 and 1921. It further provides that every claimant of any mining claim, in order to obtain the benefits of this resolution, shall file or cause to be filed in the office where the location notice or certificate is recorded on or before December 31, 1921, notice of his desire to hold said mining claim under this resolution.

H. R. 2919. Introduced by MR. SUTHERLAND; referred to the Committee on Territories. (*Annual labor claims in Alaska.*) The bill provides that annual assessment work required by law to be performed on mining claims in the Territory of Alaska may hereafter be done and performed as follows: During each year and until patent has been issued therefor, at least \$100 worth of labor shall be performed or improvement made on, or for the benefit or development of, in accordance with existing law, each mining claim in Alaska heretofore or hereafter located. The owner or locator in lieu of labor and improvements may yearly pay to the treasurer of Alaska the sum of \$100 and the Territory of Alaska is authorized to expend such funds on the public roads, trails, or bridges in the vicinity of the mining claim in question. The owner of any claim may cause work to be done upon any road, trail, etc., which will tend to benefit and develop his mining claim. The owner of a mining claim in Alaska may perform two or not more than three years' assessment work in one year and upon proof of such expenditure he shall not be required to do any assessment work thereon for the succeeding year, but for no longer than three years. Upon completion of the work required by the owner of a mining claim, he shall make and file with recorder in the precinct where the claim is located an affidavit and in which he shall state the character, locality, and value of the work performed, the time occupied, and the amount actually paid therefor, and any person who shall swear falsely in such affidavit shall be guilty of perjury and on conviction thereof shall be punished as now provided for the crime.

S. 231. Introduced by MR. PITTMAN; referred to the Committee on Mines and Mining. (*Annual assessment.*) The bill stipulates that the provision of section 2324 of the Revised Statutes of the United States, as extended and made applicable to the Territory of Alaska by the act entitled "An Act providing a civil government for Alaska," approved May 17, 1884, and the act entitled "An Act making further provision for a civil government for Alaska, and for other purposes," approved June 6, 1900, as amended, which provides that the period within which the work required to be done annually on all unpatented mineral claims shall commence on the first day of January succeeding the date of location of such claims, such provision being applicable to all claims located since the tenth day of May, 1872, be, and the same hereby is, amended to provide that the period within which the work required to be done annually on all unpatented mineral claims located after the passage of this act shall commence on the first day of July succeeding the date of location of such claims, and that the period within which the work required to be done annually on all other unpatented mineral claims to which section 2324 of the Revised Statutes of the United States as extended to the Territory of Alaska is application shall commence on the first day of July of each year, provided, that the period for performing the work required by section 2324 of the Revised Statutes, as extended to the Territory of Alaska, and by this act beginning the first day of January, 1920, which but for this act would expire the thirty first day of December, 1920, is extended to and including the thirtieth day of June, 1921.

H. R. 5025. Introduced by MR. McFADDEN; referred to the Committee on Ways and Means. (*Excise Tax and Bonus.*) This bill is substantially the same as the bill introduced in the sixty-sixth Congress by Mr. McFadden, H. R. 13201. The bill provides revenue from an excise tax of 50 cents per pennyweight of fine gold contained in manufactured articles, to be collected at the time of sale, and for a premium of 50 cents per pennyweight to be paid to the producers of newly mined gold in the United States and its possessions. The government is fully protected under the provisions of the bill from the presentation of other than newly mined gold to receive the premium. The bill differs from H. R. 13201 in that the period has been lessened from five to three years, and that the Secretary of the Treasury is granted full authority to terminate entirely the provisions of the act on three months notice in the event of a return to normal economic conditions prior to the expiration of the same. Exporters of articles containing gold have been exempted, as they were from the payment of the luxury tax, in order not to interfere with foreign competition. Revenue will be derived on all gold articles of foreign manufacture sold in this country. The bill provides an equitable adjustment between the producer and the industrial consumer of gold.

Extensive hearings were conducted in the last Congress on this bill, and it was reported favorably by the Sub-Committee of the Ways and Means Committee before adjournment.

H. R. 4812. Introduced by MR. HAYDEN; referred to the Committee on Public Lands. (*Disposal public lands containing deposits of copper at depth.*) The bill authorizes the Secretary of the Interior to grant prospecting permits which shall give the exclusive right for a period of three years to prospect for deposits of copper in rock in place underlying an overburden of wash, conglomerate, or nonmineral-bearing formation in the states of Arizona, New Mexico, Nevada and Utah, the leases to contain 1288 acres or less. The permittee must begin operations within one year from the date of permit and within two years drill one or more test holes, sink one or more shafts to a depth of not less than 500 feet unless copper be discovered sooner. The permit may be extended for a further period of three years if it shall appear that he has complied with these regulations and failed to discover copper. Upon the discovery of a valuable deposit of copper within the limits of the land embraced in the permit and proof of the expenditure in labor and improvements of not less than a sum equal to \$25 for each acre and upon the payment of \$5 per acre patentee shall be granted to the permittee for the land.

S. 563. Introduced by MR. HARRISON (for Mr. King); referred to the Committee on Public Lands. (*Amending Act for promotion of mining of coal, phosphate, oil, oil shale, gas and sodium on public domain.*) The bill provides that the designation of any lands of the United States or deposits of oil or gas owned by the United States, as being within any known geological structure of a producing oil or gas field, shall not defeat or require the rejection of any application for a prospecting permit under section 13 of the Act of Congress approved February 25, 1920, filed in the proper land office prior to such designation and prior to discovery of oil or gas on the structure, but such applications may, if otherwise regular, be approved notwithstanding the designation. In the event that any such applications have been revoked or denied, the same shall be reinstated as of the date of such revocation or denial.

H. J. Res. 38. Introduced by MR. BARBOUR; referred to the Committee on Public Lands. (*Amending Leasing Bill.*) The bill provides that section 18a of the act entitled "An Act to promote the mining of coal, phosphate, oil, oil shale, gas, and sodium on the public domain, approved February 25, 1920, be continued in full force and effect for the period of six months from and after the approval of this resolution, provided, that it shall only be applicable for the settlement or compromising of gas or petroleum placer claims upon which there has been drilled an existing producing well, or a well which has produced oil or gas in commercial quantities,

prior to the passage of the act. Section 18a provides that whenever the validity of any gas or petroleum placer claim under pre-existing law to land embraced in the Executive order of withdrawal, issued September 27, 1909, has been or may hereafter be drawn in question on behalf of the United States in any departmental or judicial proceedings, the President is authorized at any time within twelve months after the approval of the act to direct the compromise and settlement of any such controversy upon such terms and conditions as may be agreed upon, to be carried out by an exchange or division of land or division of the proceeds of operation.

S. 474. Introduced by MR. SMOOT; **H. R. 2350** by MR. TAYLOR of Colorado, and **H. R. 2447** by MR. PARRISH. These three bills are substantially the same as those which we have reviewed above, introduced by Messrs. HARRISON and BARBOUR.

S. 479. Introduced by MR. SMOOT; referred to the Committee on Public Lands. (*Boron Deposits.*) The bill provides that hereafter all deposits of boron minerals and lands containing such deposits owned by the United States, except deposits of potassium borates provided for in the act approved October 2, 1917, shall be subject to disposition only in the form and manner prescribed for the disposal of borates of sodium in the act approved February 25, 1920, entitled "An Act to promote the mining of coal, phosphate, oil, oil shale, gas, and sodium on the public domain."

LABOR

S. 408. Introduced by MR. KENYON; referred to the Committee on Education and Labor. (*Department of Social Welfare.*) The bill provides for the creation of a department of Social Welfare, with a secretary to receive a salary of \$12,000 per year. The duty of this department is to safeguard and promote the social welfare of the people of the United States. It transfers from the Treasury Department to the Department of Welfare the Bureau of Public Health and the Hygienic Laboratory; the Bureau of Education from the Department of the Interior to the Department of Welfare; the Bureau of Industrial Housing and Transportation from the Department of Labor, the United States Employment Service from the Department of Labor, and the office of Home Economics from the Department of Agriculture.

S. 681. Introduced by MR. KENYON; referred to the Committee on Education and Labor. (*National Employment System.*) The bill authorizes the promotion of the United States Employment Service to a bureau of the Department of Labor, which shall have a general director to receive a salary of \$5,000 a year. The duty of this bureau will be to establish and maintain a national system of employment and assist in establishing and maintaining systems of employment offices in the several states and

to coordinate the public employment offices throughout the country by furnishing and publishing as to labor conditions, by maintaining a system for clearing labor between the several states, establishing and maintaining uniform standards, policies and procedure and by assisting in the transportation of workers to such places as may be deemed necessary for the purpose of securing employment. An appropriation of \$4,000,000 for the fiscal year ending June 30, 1920, and for each fiscal year thereafter up to and including the fiscal year ending June 30, 1922. Seventy-five percent of the money appropriated shall be allotted on the basis of their respective population. The entire regulations of the bill are transferred to the Secretary of Labor, who is charged with the responsibility of making reports and ascertaining whether the systems in the various states are conducted in accordance with the provisions of the bill.

H. J. Res. 3. Introduced by MR. BLACK; referred to the Committee on Interstate and Foreign Commerce. The bill provides that the Railroad Labor Board is directed to inquire into the justness and reasonableness of wages and salaries of railroad employees in the light of present conditions, taking into consideration, among other relevant circumstances, the scale of wages paid for similar kinds of work in other industries, and the relation between wages and the cost of living; and after making such inquiry to make such reductions, if any, of the wage increases awarded in its decision numbered two, of July 20, 1920, as it may find to be just and reasonable.

S. 1673. Introduced by MR. SHEPPARD; referred to the Committee on Interstate Commerce (*Interstate cooperative associations.*) The bill creates in the Department of Labor a bureau to be known as the Bureau of Interstate Cooperative Associations, which will authorize any number of persons, not less than fifty, to associate themselves as a co-operative association for the purpose of conducting interstate business on the cooperative plan, the business to be carried on not for profit. Each association will be managed by a board of five directors. The associations are financed through the sale of stock and discretion in the carrying out of the bill is placed with the Secretary of Labor.

WAR MINERALS

S. 1364. Introduced by MR. ROBINSON; referred to the Committee on Mines and Mining (*Liberalization.*) This bill amends section 5 of the act approved March 2, 1919, entitled "An Act to provide relief in cases of contracts connected with the prosecution of the war, etc.," by adding the following proviso: All claimants who in response to any personal, written, or published request or demand from any of the government agencies mentioned in said act in good faith expended money in producing or preparing to produce any of the ores or minerals named therein

and have heretofore filed their claims within the time and in the manner prescribed by the act, shall be reimbursed such net losses as they may have been found to have incurred and are in justice and equity entitled to from the appropriation in the act, and the unexpended portion of the appropriation carried in the act be continued available for the purposes named above until all claims in the act shall be finally settled or disposed of.

BLUE SKY

H. R. 2352. Introduced by MR. TAYLOR; referred to the Committee on Judiciary. (*Federal stock interstate Act.*) The bill provides that every corporation organized for the purpose of engaging in interstate commerce which proposes to offer shares of its stock must file with the Secretary of the Treasury a statement which contains the names and addresses of the board of directors, name of state or sovereign power, under the laws of which the corporation was organized, the purpose for which the corporation was organized and the general nature of the business, capitalization, including authorized amount of its capital stock, the number and classes of shares into which such stock is divided, a description of the respective voting rights, the manner in which the capital of the corporation has been paid in, whether in cash or property, the amount paid in cash, property and for other consideration stated separately, with a description of the character and value of the property and other consideration received by the corporation; the purpose for which the shares are offered; the names and addresses of the vendors; names of public accountants, who have examined the books, etc.; every prospectus, advertisement, etc., must mention this act and that the shares are offered in accordance with its terms. The Secretary of the Treasury is given full authority under the act to carry out its provisions, one of which is the creation of a bureau in the Treasury Department to look after this work. It appropriates the sum of \$450,000.

S. 1612. Introduced by MR. CAPPER; referred to the Committee on Interstate Commerce. (*Amending Sherman Law.*) The bill provides that before the sale of stock, etc., it shall be necessary to file with the Federal Trade Commission a statement showing the names and addresses of officers, purpose for which corporation is organized, general nature of its business, location of its principal and branch offices, amount and plan of capitalization, consideration for which the stock has been and will be issued, the purposes to which the proceeds of sales of stock will be devoted, a description of the property and assets and the amount and classes of liabilities of the corporation or association, the names of promoters, fiscal agents, and underwriters; the rate of commission, etc., copies of all promotion contracts or agreements. The bill imposes a fine of \$5,000, imprisonment for one year or both for violation of its provisions and appropriates the sum of \$50,000 for carrying out the act.

ANTI-TRUST

S. 550. Introduced by MR. HARRISON (for Mr. King); referred to the Committee on Judiciary. (*Amending the Anti-Trust Law.*) The bill expressly describes as illegal all contracts, combinations in the form of incorporation, trust, or other form, association, agreement, arrangement, meeting, conference, understanding, or conspiracy for the purpose of monopolizing, dominating or controlling the trade or commerce in any commodity between two or more states, or of fixing or determining the charge or charges at which any commodity shall be sold for transportation or for the purpose of restricting or withholding any commodity from sale or for the purpose of excluding any person from buying or selling or procuring any commodity for transportation. Every person who may engage in or be a party to, any such contract, etc., shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine not exceeding \$5,000, imprisonment for one year, or both. A similar fine is provided for every person who attempts to interfere with, restrain, or prevent the movement of passengers or freight in commerce between the states or with foreign nations. The same restrictions are placed around the District of Columbia or with any territory of the United States. Circuit Courts of the United States are vested with jurisdiction to restrain violations of the act.

H. R. 2373. Introduced by MR. VOLSTEAD and reported to the House by the Judiciary Committee on April 26. (*Association of Agricultural Producers.*) The bill authorizes persons engaged in the production of agricultural products to act together in associations in collectively processing and preparing for market, handling, and marketing in interstate and foreign commerce, their products. The association may have marketing agencies in common and may make the necessary contracts and agreements. No member of the association is allowed more than one vote and the association will not pay dividends in excess of 8 percent per annum. If the Secretary of Agriculture shall have any reason to believe that such association monopolizes or restrains trade to such an extent that the price of any agricultural product is unduly enhanced, he may serve upon such an association a complaint stating his charge. The Department of Justice is charged with the enforcement of the order. The bill very carefully defines the method of procedure by the Secretary of Agriculture and the Department of Justice in carrying out the provisions of the act.

S. 983. Introduced by MR. CAPPER; referred to the Committee on Agriculture and Forestry. This bill is substantially the same as the bill introduced by MR. VOLSTEAD, authorizing the association of agricultural producers.

INTERSTATE COMMERCE

S. 16. Introduced by MR. POINDEXTER; referred to the Committee on Interstate Com-

merce. (*To prohibit interference with commerce.*) The bill provides that a fine not exceeding \$10,000 or imprisonment not exceeding ten years, or both for whosoever shall obstruct, delay, hinder, or prevent the movement of commodities in commerce with foreign nations or among the several states shall by word of mouth, or by the presentation, exhibition, or circulation of written or printed words, or otherwise. A fine of \$15,000, imprisonment not exceeding fifteen years or both is imposed upon any one who shall obstruct or prevent the movement of commodities in commerce with foreign nations or among the several states by force or violence, or by threats or menace of any kind or prevent any person from engaging in employment or from continuing in employment in any capacity in the production, care maintenance, or operation of any means of such commerce. A fine of \$10,000 imprisonment not exceeding ten years or both is imposed for the obstruction or prevention of the movement of commodities in commerce by the destruction of any car, bridge, track, ship or any other means of such commerce or who shall persuade others so to do. The bill also makes it unlawful for two or more persons being officers or directors, etc., of any carrier subject to the act to enter into a combination or agreement which can be submitted for decision to the Railroad Labor Board to hinder the operation of trains or other facilities of transportation for the movement of commodities or persons. A fine of \$500, imprisonment for six months or both are imposed for violation of the provisions of the act.

S. 690. Introduced by MR. CALDER; referred to the Committee on Interstate Commerce. This bill provides that the Interstate Commerce Commission, after a hearing, either upon complaint or upon its own initiative without complaint, is of the opinion that shortage of equipment, congestion of traffic, or other unusual impediment to transportation exists or is imminent, upon the making and filing of a report has the authority, first, to suspend the operation of any or all rules, regulations, or practices then established with respect to car service for such time as may be determined; second, to make just and reasonable directions with respect to car service, without discrimination as between shippers or commodities, except that preference may be given to shipments of live stock and perishable property; third, to require such joint or common use of terminals, including main-line track for a reasonable distance outside of such terminals.

S. 552. Introduced by MR. HARRISON (for Mr. King); referred to the Committee on Interstate Commerce. (*Uniform rates.*) The bill provides that the standard measure of the work and duty performed by a common carrier shall be the ton-mile. Each common carrier of freight by railroad shall on or before January 1, 1922, make and establish a basic rate per ton-mile for the transportation of freight over its lines and shall file such rate

with the Interstate Commerce Commission, which, when approved, shall be the lawful basic rate for such carrier at the average revenue per ton-mile received by such carrier in the calendar years 1915 to 1920, inclusive. The Interstate Commerce Commission has the power to indicate the weight capacity of cars according to their relative cubical contents and without regard to the commodities that may be carried therein. They shall prescribe proper rules and regulations to prevent improper packing and loading of cars and shall also prescribe such regulations as to the mixing of commodities in the same car; also rules and regulations governing the loading and use of cars which are designed exclusively for special kinds of freight or commodities. Each carrier must before January 1, 1922, make and file with the Interstate Commerce Commission a new classification of commodities which shall comprehend but five classes. The rate for the first class to be two times the basic ton-mile rate; second class, four times the basic ton-mile rate; third class, six times the basic ton-mile rate; fourth class, eight times the basic ton-mile rate; and the fifth class, ten times the basic ton-mile rate. Each carrier shall file with the commission a new tariff of class rates upon such new classification, which shall become the lawful rates for classified freight consigned in less than carload quantities. The commission shall prescribe proper minimum weights and mileage at which charges for the transportation of classified freight shall be computed. Freight moving in carloads at the ton-mile rate shall be loaded by the consignor and unloaded by the consignee for the use of team tracks in railroad yards. Carriers may by joint arrangement and the approval of the Interstate Commerce Commission, and for the sole purpose of equalizing the factor of mileage between definite regions of production and consumption for certain designated commodities, established common points between which such commodities may move at uniform mileage. The commission also is authorized to ascertain the proper costs including current capital charges for uses of terminal facilities, etc. The bill specifically declares that the policy of Congress is that the reasonable rate for the transportation of freight by common carriers shall be competitive; between rail carriers shall be preserved; that competition between rail carriers and coastwise shipping, river carriage, motor carriage, and other means of transportation shall be preserved in order to establish and maintain rates of transportation at reasonable competitive levels.

H. J. Res. 4. Introduced by MR. BLACK; referred to the Committee on Interstate and Foreign Commerce. It is resolved by Congress that the Interstate Commerce Commission be directed to review its decision of July 29, 1920, and any subsequent changes or modifications thereof, and to make such reductions, if any, of the increased rates, fares, and charges therein authorized as in its judgment will be just and reasonable. This bill abolishes section 15a of the Interstate Commerce Act.

H. R. 2409. Introduced by MR. WRIGHT; referred to the Committee on Interstate and Foreign Commerce. (*Railroad rates.*) This bill provides that for a period of one year commencing thirty days after the passage of the act, all railroad companies and common carriers shall not be permitted to charge any rates, fares, or charges for the transportation of persons or property in excess of the rates which had been fixed and were in force on the 27th day of February 1920. During the year and one month following the passage of the act the Interstate Commerce Commission shall attempt to determine, establish, readjust and fix compensation, rates, fares, and charges. They shall not only determine what compensation, rates, etc., shall be paid into the company but they shall take into consideration an honest, efficient, and economical management, including salaries of officials and employes and reasonable expenditures for maintenance of way, structures and equipment, but also taking into consideration the actual value of the railroad, the business and financial conditions of the section or territory to be affected by such rates, and the profits being made or losses sustained by the businesses and industries in such section and so fix the rate that the compensation received by the railroads will not be out of proportion but in keeping with business and financial conditions and the general depression or prosperity, as the case may be.

S. 621. Introduced by MR. FLETCHER; referred to the Committee on Interstate Commerce. (*Termination Federal Control of Railroads.*) The bill amends Section 206 of the Act to provide for the termination of Federal control of fares, charges, classifications, regulations, or practices which were unjust, unreasonable, unjustly discriminatory, or unduly or unreasonably prejudicial, or otherwise in violation of the Interstate Commerce Act, shall be filed with the commission, within two years after the termination of Federal control against the agent designated by the President, naming in the petition the railroad or system of transportation against which such complaint would have been brought if such railroad had not been under Federal control at the time of the complaint. The commission is given jurisdiction to hear and decide such complaints and all notices and orders shall be served upon the agent designated by the President under subdivision A.

Identical bills have been introduced by Representatives SANDLIN and KINCHELOE, respectively, H. R. 4801 and H. R. 288.

S. 15. Introduced by MR. POINDEXTER; referred to the Committee on Interstate Commerce. (*Long and short haul.*) The bill provides that it shall be unlawful for any common carrier to charge or receive any greater compensation in the aggregate for the transportation of passengers, or of like kind of property for a shorter than for a longer distance over the same line or route in the same direction, the shorter being included within the longer distance, or to charge any greater compensation as a through route than the aggregate of

the intermediate rates subject to the provisions of this act. Whenever a carrier by railroad shall, in competition with a water route or routes, reduce the rates on the carriage of any species of freight it shall not increase such rates unless after hearing and an order granting permission therefor by the Interstate Commerce Commission.

Similar bills were introduced by Senator PITTMAN, S. 228, and MR. HAYDEN, H. R. 263.

S. 922. Introduced by MR. LENROOT; referred to the Committee on Interstate Commerce. (*Creation of a national railway corporation.*) The bill provides for a national railway corporation to include eleven persons to be appointed by the President of the United States with the approval of the Senate. One member shall be appointed from among the members of the Interstate Commerce Commission; one shall be appointed from five persons proposed from the National Association of Railway and Utilities Commissioners; two proposed by the employes of the corporation and of railroads controlled by it, acting through their trade-unions and brotherhoods; two proposed by the Chamber of Commerce of the United States; two proposed by the farmers' and agricultural organizations, three proposed by stockholders of the corporation. The Attorney General of the United States shall effect the organization of the corporation, which shall have perpetual succession subject to dissolution by act of Congress. It shall have the power to make contracts, incur liabilities, acquire, own and control railroads, maintain the necessary offices to conduct this business; to lay out, operate, construct, furnish and maintain the railroads.

IMMIGRATION

H. R. 4075. Introduced by MR. JOHNSON; referred to the Committee on Immigration and Naturalization. (*Limiting Immigration.*) This bill is now a law, having passed the House and Senate and signed by the President, becoming effective June 3, 1921. It provides that the number of aliens of any nationality who may be admitted under the immigration laws in any fiscal year shall be limited to 3 percent of the number of foreign born persons of such nationality resident in the United States as determined by the United States census of 1910. The provisions of the bill expressly exempt from these provisions government officials, aliens residing in the States who return from a temporary visit abroad, aliens in continuous transit through the United States, aliens lawfully admitted to the United States who later go in transit from one part of the United States to another through foreign contiguous territory, aliens visiting the United States as tourists or temporarily for business or pleasure, aliens from countries immigration from which is regulated in accordance with treaties, aliens from the so-called Asiatic barred zone, those who have resided continuously for at least one year immediately preceding the time of their admission to the United States in the

Dominion of Canada, Newfoundland, Cuba, Mexico and the countries of Central and South America and those entitled to readmission under the joint resolution which authorizes readmission for those who have been conscripted or have volunteered for service with the military forces of the United States or cobelligerent forces, or aliens who prove to the satisfaction of the proper immigration officer or of the Secretary of Labor that they are seeking admission to the United States to avoid religious persecution. The Secretaries of State, Commerce, and Labor jointly are called upon to prepare a statement showing the number of persons of the various nationalities residing in the United States as determined by the 1910 census. The number of aliens of any nationality who may be admitted in any month shall not exceed 20 percent of the total number of aliens of such nationality who are admissible in that fiscal year. The Commissioner General of Immigration with the approval of the Secretary of Labor shall prescribe rules and regulations necessary to carry out the provisions of the act.

EDUCATION

H. Res. 72. Introduced by MR. FISH; referred to the Committee on Education. The bill provides that there shall be immediately enacted a law to the end that the English language shall be the controlling medium in our elementary and high schools, both public and private, and that each school shall be required to teach at least one year of American history and civil government.

INTERIOR DEPARTMENT

S. 551. Introduced by MR. HARRISON (for MR. KING); referred to the Committee on Public Lands. (*Western Branch.*) The bill provides that a branch of the Interior Department be established at a suitable place in one of the public-land states west of the Mississippi River, which shall be designated by the President, and which shall be under the direction of the Secretary of the Interior or an assistant. Section 2 provides that there shall be transferred to said branch from the main office of the Interior Department in the District of Columbia the offices of the Commissioner of the General Land Office, the Geological Survey, the Bureau of Mines, the Reclamation Service, and of the Commissioner of Indian Affairs, and the National Park Service, and the functions and duties of these offices shall be hereafter performed at the branch of the Interior Department created by this act. The Secretary of Interior is authorized to remove and transfer from time to time to said branch of the Interior Department all maps, files, plats, and other records necessary for the proper administration of the duties and functions of such branch. The act approved February 1, 1905, entitled "An Act providing for the transfer of forest reserves from the Department of the Interior to the Department of Agriculture" is repealed and upon the passage of this act the Secretary of the Interior shall execute all laws

affecting lands of the United States reserved or acquired under the provision of section 24 of the act entitled "An Act to repeal the timber-culture laws. The sum of \$1,000,000 is appropriated for the purpose of procuring a building site and the erection of a building suitable for caring for said branch.

DIVISION OF MINES AND GEOLOGY

S. 230. Introduced by MR. PITTMAN; referred to the Committee on Mines and Mining. This bill is similar to the bill introduced by Ex-Senator Henderson in the Sixty-Sixth Congress and provides for the establishment of a division of mines and geology under the control and direction of an Assistant Secretary of the Interior to receive a salary of \$10,000 per year. It also provides that all powers and duties now conferred by law upon the Bureau of Mines and the Geological Survey, or any powers and duties conferred by law upon any executive department, commission, bureau agency, office or officer, which in the opinion of the President, relate to mining, metallurgy, and mineral technology or the Geological Survey, the classification of public lands, the examination of the geological structure, mineral resources and products of the national domain are vested in the Division of Mines and Geology.

GOVERNMENT DEPARTMENTS

S. 1607. Introduced by MR. KENYON; referred to the Committee on Education and Labor. (*Department of Public Welfare.*) This bill creates a department of Public Welfare, under which department there shall be a division of Education, a division of Public Health, Social Service, and Veteran Service. The bill appropriates \$10,000 to carry out its provisions.

OIL

S. 323. Introduced by MR. McKELLAR; referred to the Committee on Foreign Relations. (*Oil lands and foreign governments.*) The bill provides that deposits of oil or oil shale, or the manufactured or refined products thereof, in the United States or its Territories, or any land containing such deposits, or any stock or bond interest in corporations owning such land or deposits, when the purpose is to export such products or otherwise to use them in foreign commerce, shall not be acquired by any foreign governments whenever the United States or its nationals having a like purpose are prohibited from acquiring such lands or rights by the governments of such foreign countries. The bill requires the Shipping Board to report on or before July 21, 1921, what foreign governments, dominions, etc., are violating this act and thereafter no oil or oil shale shall be exported to any foreign government or its nationals who have been so reported. If the Shipping Board, by resolution, shall report any government, etc., as violating the act the President shall at once issue a proclamation declaring an embargo against shipping any of these products to such foreign governments and same shall not be again exported until the Shipping Board re-

ports that the government is no longer violating the act. The provisions included in the Espionage Act shall be enforced for any violation of the terms of this bill.

H. J. Res. 10. Introduced by MR. GALLIVAN; referred to the Committee on Foreign Affairs. (*Exploration of oil in territory controlled by England.*) The bill provides that until and unless England concedes equal opportunities to Americans to explore for and to produce oil in territory controlled by England, English nationals are prohibited from exploring or producing oil in America.

BOLSHEVISM

H. R. 2488. Introduced by MR. UPSHAW; referred to the Committee on Post Office and Post Roads. The bill provides that from and after six months from the date of the passage of this act it shall be unlawful for any individual, firm, association, corporation, or any agent of any firm, individual, etc., to circulate through the mails any paper, magazine, pamphlet, or periodical published in the United States in any foreign language, unless such publication shall carry in parallel column a full and accurate translation of the same in the English language. Any person violating this act will be subject to a fine of \$5,000 and one year's imprisonment for each such offense.

METRIC SYSTEM

S. 565. Introduced by MR. HARRISON (for MR. KING); referred to the Committee on Agriculture. The bill provides for the establishment of a standard decimal system of weights and measures for the United States.

H. R. 10. Introduced by MR. BRITTEN; referred to the Committee on Coinage, Weights, and Measures. The bill provides for the creation of a metric system of weights and measures as the single standard of weights and measures.

INDUSTRIAL NOTES

THE Automatic Reclosing Circuit Breaker Company of Columbus, has opened a branch office in St. Louis with offices in the National Bank of Commerce Building. Mr. C. P. Lohr will have charge of this office, and with his knowledge of and experience with the company's apparatus, the company feels assured that the interests of its customers in his territory will be handled in a capable and satisfactory manner.

FREDERICK B. HYDER, E. M., has resigned his position as valuation engineer of the Income Tax Unit, Bureau of Internal Revenue, to resume the practice of mining and metallurgical engineering. He intends to specialize in analytic studies of mineral industries and the solution in co-operation with taxpayers, accountants and attorneys of federal tax problems of valuation, depletion and depreciation of mines and other natural resources. He will conduct offices at 460 Montgomery Street, San Francisco, California.



IMMIGRATION

THERE ARE MANY ARGUMENTS pro and con concerning immigration. It is evident that Congress will decide in a very short time as to whether we shall restrict immigration or shall maintain the policy of previous years. SENATOR HEFLIN advances some interesting arguments in favor of complete restriction. In part he says:

"We have tried for a long time to pass an immigration law that would really restrict but we have invariably discovered that there were loopholes through which undesirable people could come. Radical literature distributed at Ansonia, Connecticut, bearing the caption 'The first day of May—the day of reckoning and liberation,' and purporting to be issued by anarchist groups of the United States and Canada, were found this morning. In them workers are advised to refuse to pay taxes and rents, refuse to obey laws, take possession of the land, factories, mills, and mines and to go armed to mass meetings or parades.

"Is this government called upon to open the doors of this country to people who openly and notoriously advise the violation of our laws? Several months ago one of these men who oppose our form of government, unfurled and burned the United States flag before an audience of his kind in New York City. I think some small fine was imposed upon him but he is now again a free man. It is high time for this government to take stock; it is high time that we were finding out here at home just 'who is who' in America.

"If I had my way about it, I would shut our immigration doors tightly for one year at least, and I would very rigidly restrict it for all time to come. I am in favor of putting a commission of loyal Americans on the other side of the ocean to pass on prospective immigrants. I am in favor of having another such commission on this side to examine them and their credentials before they are permitted to set foot upon American soil. It is no small thing to be a citizen of the United States. Today the proudest boast that mortal man can make is 'I am an American citizen.' I know that there are many aliens here who are loyal and true, and they have my very best wishes; but I am speaking of those who do not appreciate our government. I am speaking of cold facts. There are people here who defy our courts, challenge the integrity and authority of our flag. They blew up some of our guns and munition plants during the war. They poisoned our horses at the camps. They poisoned food intended for our soldiers. How did they come here? They came here through the gates of American immigration laws."

WILL OLD PRICES EVER RETURN?

EVERY ONE would like to see old prices come back. There are few who find the dollar elastic enough to cover the present high cost of living. E. D. KING of the *Magazine of Wall Street*, has the following comment to make as to whether we can expect old prices to be with us again:

"The United States is in the most favored position of any important nation. The dollar is at a premium in practically every country of the world and will remain so for many years, barring another war or some such calamity. Commodity prices here have been driven down almost within reach of the old levels and in this respect we have made more progress than any other nation.

"Despite the handicap of adverse exchange rates, most foreign countries, including the neutral nations, are making some progress toward lower prices. Prices have fallen in Sweden and the other Scandinavian countries, if not to an equal extent to the United States, at least as much as in the case of the stronger belligerents.

"Investigation of world-wide conditions reveals the fact that deflation is universal. There are exceptions, such as Italy, but the situation in that country only contrasts all the more strongly with conditions elsewhere. In some nations such as the United States and Great Britain, the most complete progress has been made.

"In others, such as France, progress has also been made but not very much. In others, such as Italy, no progress at all has been made. From all this it is difficult to make any general statement that will apply equally in all cases but one general conclusion can be drawn and that is that the high point of inflation has been passed and that considering the force of present economic circumstances, the chances that the old prices will return are exceedingly remote."

EDGE ON TARIFF REVISION

SENATOR WALTER E. EDGE of New Jersey, who is a strong advocate of business and who has been behind President Harding's announcement: "More business in government; less government in business," in an address before the National Foreign Trade Council, with particular reference to our tariff revision, says:

"National prosperity is dependent on production and on industry. Above everything else government co-operation with private business must be substituted for government

rivalry, competition, oppression and persecution. All the arbitrary legislation in the world, accomplishing only artificial results, will not effect a permanent cure for economic depression and far less will it stimulate American production, trade, commerce, transportation or any other feature of economic activity. We have tried direct price-fixing by legislation, and indirect price-boosting and all such laws have failed miserably in opposition to or in competition with that inexorable, unwritten law of supply and demand. The belief prevails in some minds that tariff legislation is necessary for the establishment of American production in business. We must recognize, however, that as a creditor nation, exporting three times the value of its imports, we must consider whether in the end the advantages gained by increased duties will actually show a profitable balance. Between the Webb Act, legalizing combinations for export business and the so-called Edge Act the American business man and financier has every facility for selling goods abroad, even to impoverished buyers; so the foreign market is provided for if American business only will cultivate it.

"But, I would repeat, arbitrary legislation accomplishing only artificial results will prove hurtful rather than helpful. We must have practical, business-like legislation, not theoretical, visionary legislation, prompted by sentimental and emotional theorists who mean well but are misled."

TREGO OPPOSES SALES TAX

APHRASE frequently heard from every branch of industry during the days when the 1918 revenue law was being enacted was this: "Industry has no desire to escape its just share of taxation"—but nevertheless there is no industry which wishes to be unfairly taxed. The 1921 tax revision, which will be undertaken by Congress at this session, is of more than unusual interest. Numerous proposals are being made by those making a study of the subject, among them the sales tax. There has been no suggestion made which has received greater condemnation or heartier commendation than this suggestion. J. H. TREGO, executive secretary of the National Association of Credit Men, says:

"We have heard advocates of the sales tax say that spending and not saving should be taxed. Let us look a while and see whether this is a real common sense and fair statement. Inordinate spending and inordinate saving are equally bad. One is prodigal and the other is miserly. Thrift is just as much common sense applied to spending as prudence applied to saving. The ideas are inter-

related. A certain portion of a man's income must be spent. As incomes increase, the proportion spent decreases and the proportion of spending is largest with the laboring and middle classes.

"If spending is necessary, if common sense spending is important to the commerce and industries of a people, why should spending rather than saving be taxed? It is not a fair proposition in our opinion, and when you consider a man with a large family who must spend more than the man with a smaller family to impose a tax on sales is inequitable and unfair. Simplicity is the chief charm of the tax on sales, but simplicity in taxation always spells inequality. Equality in taxation can only be conserved by some complexity in its plans.

"Why isn't it proper to tax individual incomes rather than to place the burden on either savings or spending? Should not every citizen contribute according to his abilities, granting proper exemptions to those on whom even a slight tax will be very burdensome? It seems strange to us that so many good men have been gripped by the idea of a sales tax, especially a turnover tax, when on a careful analysis such a tax would be very unequal, in its application and prove in years just as burdensome and uneconomic as the excess profits tax."

HOW TO PREVENT A COAL SHORT-AGE NEXT WINTER

CHAMBERS OF COMMERCE, railroads and economists from various walks of life are greatly concerned over the prospect of another serious coal famine. Various remedies are discussed, but there is one possible remedy upon which all agree, namely, the storage of adequate supplies while stocks are plentiful and weather is favorable. The traffic commissioner of the St. Louis Chamber of Commerce is quoted in the *America Coal Journal* (New York) as follows:

"It is imperative that the public be awakened to the coal situation and the danger of a shortage and that every effort be made to prevent it by stimulating an early movement of coal in large volume. If the railroads can secure a heavy coal movement during the next few weeks or even months in order to relieve them of a burden at a later time when the resumption of business may tax their equipment and facilities it will not only be to their advantage, but it will also be to the advantage of the householder and the business man.

"We are in such close proximity to the source of supply of bituminous coal that we are prone to overlook the necessity for providing against coal emergencies. This tendency has on more than one occasion found us less prepared to withstand adverse conditions than communities more remote from the coal fields. A very large percent of the 8,000,000 tons of bituminous coal consumed in the St. Louis-East St. Louis district is produced within a radius of approximately thirty miles of St. Louis. This includes substantially 2,000,000 consumed by the railroads.

"The quality of this coal, however, is such that it cannot be stored for any great length of time in the open, nor can it be stored safely in large quantities under cover unless unusual ventilation is provided. Nevertheless, from information which has come to me, through numerous conferences which we have held on this subject from time to time in the past, I am convinced that much more coal can be stored here than is customary."

A communication received by the St. Louis traffic bureau from C. H. Markham, president of the Illinois Central, and quoted in the same publication, expresses the railroads' view of the seriousness of the situation:

"It is earnestly to be hoped that coal dealers and consumers have not forgotten the lessons taught by coal shortages of recent years, particularly the one of 1920. These shortages were produced largely by dealers and consumers themselves in not beginning to buy and store coal in adequate volume until late in the year. It is clear that unless coal dealers and consumers profit by the lessons of the past and begin at once to lay in necessary fall and winter supplies another coal shortage will be brought about.

"The coal carrying equipment of the railroads is sufficient to handle a large evenly balanced coal tonnage, but it is inadequate to handle the coal movement when the bulk of it is thrown upon the railways in a comparatively short period after midsummer.

"Coal mine operators are now in a position to produce and the railways are in a position to move a large volume of coal. If dealers and consumers fail to take advantage of the present opportunity to lay in fall and winter supplies and another coal shortage eventuates the public in fairness certainly will not attach blame to the coal operators and the railways. More than 255,000 open top cars are now standing idle on the side tracks of the railways. Nearly one-half of the open top equipment of the Illinois Central system is idle.

"The situation, as we visualize it, is that the country is headed for a serious coal shortage unless consumers immediately start moving coal in large volume. We are emerging from the business depression. Within a few months the railways may be taxed to their capacity in handling traffic other than coal."

PRESIDENT REITERATES VIEWS

PRESIDENT HARDING again reiterated his famous statement "Less government in business and more business in government," at the meeting of the Columbia Bankers' Association on April 27. In part he says:

"I believe the government should put an end to interference with righteous, legitimate business. I believe that it should cease to be a competitor of business which ought to be in the hands of private enterprises. I bring you the assurance that a sane and sober America still believes in sane and sober financial methods. It is useless to think of going ahead until America returns to sane and normal financial methods. No nation can succeed along any lines of endeavor unless that nation is committed to a sane financial policy and to the righteous discharge of its obligations. I don't believe the government or its institutions can be run by mere theorist who never accomplished anything for themselves."

GEO. OTIS SMITH ON COAL

COAL is in the limelight. That "Something will be done about it" is obvious. DR. GEO. OTIS SMITH, Director of the U. S. Geological Survey, tells us "Why:"

"The federal government is looking into the coal bins of the country. The part that coal plays in our present-day life needs little mention before any audience. We have all learned that this fuel is what makes our modern world go round. Coal is the shortest word we have to express industrial power and domestic comfort. The dependence of the country's industry upon its supply of coal will be even greater in the future than in the past, for coal-generated mechanical power is coming

more and more to strengthen the arm of the American workman.

"When you term the coal business an essential business you admit an obligation. Lawyers may discuss whether or not coal is charged with a public use and whether or not there is any constitutional basis for the protection of the public interest in coal, but you know and I know that every agency and agent employed in the production, transportation, and distribution of coal owes something to the public, and that something is coal—coal of the quality needed and in the quantity needed, and where and when it is needed.

"The obvious cause of the fluctuation in mine operation is the fluctuation in demand, and the obvious remedy is storage near the point of consumption of enough of the output to make the demand upon the mines and the railroads fairly constant. Storage by the consumer, however, must be made profitable to him as an individual as well as beneficial to the general public.

"More and stronger associations in our industrial world are needed if we are to make progress, and indeed our law-makers will act wisely if they consider some constructive amendments to our laws that will permit a larger freedom in co-operating where co-operating is not in restraint of trade."

WHAT A LAWYER THINKS OF OHIO'S BLUE SKY LAWS

NO PUBLICATION has been more aggressive in fighting freak blue sky laws than has *Northwest Mining Truth* (Spokane). This paper reproduces from the *Ohio Law Reporter* excerpts from an address delivered before the Cleveland Bar Association by Robert Inglis, as follows:

"The first reading of our Blue Sky law obliterates the intellect like an anaesthetic. As it is re-read from time to time we get a glimmer of meaning here and there, but I think it safe to say that most of us remain in a twilight zone of bewilderment, groping our way with the aid of blanks and private rulings from the Commissioner. Specifically our confusion is the result of the form the law has taken. It is a welter of exceptions and definitions. The outstanding words are 'dealer' and 'securities,' but both are like figures seen in curved mirrors, swollen in one dimension to an impossible broadness, and contracted in another out of all recognition. Thus the term 'dealer' includes corporations issuing stock to its own members, and the word 'securities' means, apparently, everything in the nature of an investment except that which is secure. The stock of the Texas Oil Company is, but a government bond is not, a security. The statute reads like a piece of the dictionary gone mad.

"The Governor did not attempt to lay down a panacea or ascribe a definite program, but threw out the suggestion that it might be a good idea to put teeth into the law. There is a monster in the museum called the *Tyrannosaurus*. It was entirely useless and very much in the way. From the remains we see in the museum we gather that it was principally composed of teeth. What the *Tyrannosaurus* needed was not teeth, but brains."

The editor of *Northwest Mining Truth* follows the above quotation with this comment of his own:

"We should be intensely interested in Mr. Inglis' opinion of the laws drawn by the Seattle investment bankers and doughty Senator Renwick. In them he might unearth an *Assinosaurus*, a monster of false teeth and no brains that roamed around, useless and pestiferous, interfering in the affairs of all the other monsters of primeval times."

ZINC OUTPUT, 1918-1920

RECOVERABLE zinc content of ore shipped last year was 38,000 tons greater than that of the year preceding and 37,000 tons less than that of 1918. Geological Survey calculations published during May are as follows:

*U. S. Mine Production of Zinc, 1918-1920.
(In short tons)*

	Recoverable zinc content of ore shipped		
	1918	1919	1920
Arkansas.....	951	189	329
Arizona.....	1,135	859	700
California.....	2,781	236	550
Colorado.....	44,567	25,723	25,000
Idaho.....	22,581	7,997	14,000
Kentucky.....	315	36	9
Kansas.....	30,197	47,636	61,069
Oklahoma.....	161,401	178,410	219,188
S. W. Missouri.....	55,918	31,468	24,422
Central & S. E. Missouri.....	74	72	19
Montana.....	104,629	84,382	102,000
Nevada.....	8,362	4,502	4,500
New Hampshire.....	14		
New Jersey.....	98,470	92,912	77,371
New Mexico.....	12,025	3,797	5,300
New York.....	3,776	5,120	5,654
Tennessee.....	21,071	23,747	19,217
Utah.....	9,200	2,216	3,000
Virginia.....	951		
Washington.....	19		204
Wisconsin.....	50,014	40,765	27,286
Illinois.....	3,792	6,788	4,720
Total.....	632,243	556,855	595,000

BUREAU OF MINES TO GET SURPLUS
ARMY TRUCKS

THE HOUSE on motion of Representative Bland, Indiana, adopted an amendment to the Army Appropriation Bill directing the Secretary of War within thirty days from the approval of the Army Bill by the President to transfer to the Interior Department six serviceable light motor trucks for use of the Bureau of Mines at experiment and mine rescue stations. It was said that the Bureau had been trying for four months to secure surplus trucks from the army but without success. It had endeavored to purchase trucks at surplus sales at New Albany, Ind., and in New Jersey, but the trucks were unserviceable. Mr. Bland and other members insisted that it was better to turn these trucks over to other government departments than to allow them to deteriorate and to be sold as old scrap iron.

When Representative Greene suggested that the War Department should be given credit for the trucks transferred to the Interior Department, Mr. Bland opposed on the ground that it would require an appropriation for the Bureau of Mines to cover such trucks, adding "Congress has never been very lavish in its appropriations for the Bureau of Mines."

SEASONABLE COAL RATES

GOVERNMENT INTERFERENCE is a bad thing, but it would be less evil than usual if its effects were to overcome the reasonable demand for coal, in the opinion of the *American Coal Journal* (New York). This publication makes the following pointed remarks about the two Frelinghuysen bills:

"If the government is really desirous of doing something to help the coal business, or, rather, if those members of one or another branch of the government who seem to consider it their bounden duty to take what some persons regard as an undue interest in the industry are really sincere in their expressed desire to assist, the best thing they can do, aside from standing on the sidelines and, as suggested in the foregoing remarks, letting the industry work out its own salvation, is to evolve some means of overcoming the scandal of the reasonable demand, as Mr. Hoover calls it.

"Whether this can best be accomplished by the enactment of legislation providing for seasonal freight rates is a question on which the trade as a whole, is not in perfect accord. The plan has its strong advocates and equally strong opponents.

"In an effort to work out a solution of the problem, Senator Frelinghuysen of New Jersey, has evolved two seasonal rate bills. One was introduced last year and the other this year. Neither meets the situation, the one being regarded as unfavorable to the East, while the other is held to be detrimental to the interests of Western operators.

"If a seasonal rate bill is to be enacted, surely it should be possible for some of those best minds we have heard about, to evolve regulations which would be fair to all sections. The subject is a large one and not a matter for hasty legislation. We have had too much of that."

PERSONALS

A. H. JARMAN has returned to his home in California, called there by the sudden death of his father. He is expected to return to Washington shortly.

E. G. CURTIS, representing the barytes industry, spent several days in Washington during the month.

JOHN C. HOWARD, director of the American Mining Congress, was in Washington during the early part of May, en route from New York to Salt Lake City.

L. D. NEWMAN has returned to his home in Minneapolis, after spending several weeks in Washington.

ARTHUR K. MITCHELL of the St. Joe Lead Company was a caller at the offices of the Mining Congress May 7.

T. O. McGRATH, the chairman of the Mine Accounting Sub-Committee of the Standardization Division of the American Mining Congress, spent several days in Washington going over committee matters and looking after tax questions for his company. He has returned to his home at Bisbee, Arizona.

R. C. ALLEN of the Lake Superior Iron Ore Association was a caller at the offices of the Mining Congress on May 10.

DR. VAN H. MANNING of the American Petroleum Institute, was in Washington on May 17.

MARK REQUA of the Sinclair Oil Company was a caller at the offices of the MINING CONGRESS JOURNAL on May 18.

A. B. CONKLIN of Ashland, Alabama, is spending some time in Washington on matters pertaining to the graphite industry.

A. CRESSY MORRISON, Secretary of the National Acetylene Association, was a frequent visitor in Washington during May.

CHARLES W. POTTS, who has been spending considerable time in Washington in regard to war minerals relief matters and a tariff on manganese, has returned to his home at Deerwood, Minnesota.

J. C. DICK, formerly chief of the Mineral Resources Division of the United States Internal Revenue Bureau, now of Salt Lake City, was in Washington recently.

W. P. NETHERTON of San Francisco, California, is in Washington in regard to matters before the War Minerals Relief Commission.

J. H. HOLMES, JR., of Boulder, Colorado, has returned to his home after a trip to New York and Washington.

H. P. BAKER of the New Idria Quicksilver Company spent several days at the headquarters of the Mining Congress during the month.

GEORGE HOLMES, author of "Holmes on Income Tax," was a caller at the Tax Division of the American Mining Congress during the month.

A. V. DAVIS, president of the Aluminum Company of America, spent some time in Washington during the month.

NELSON FRANKLIN of Denver, Colorado, is at the New Willard Hotel.

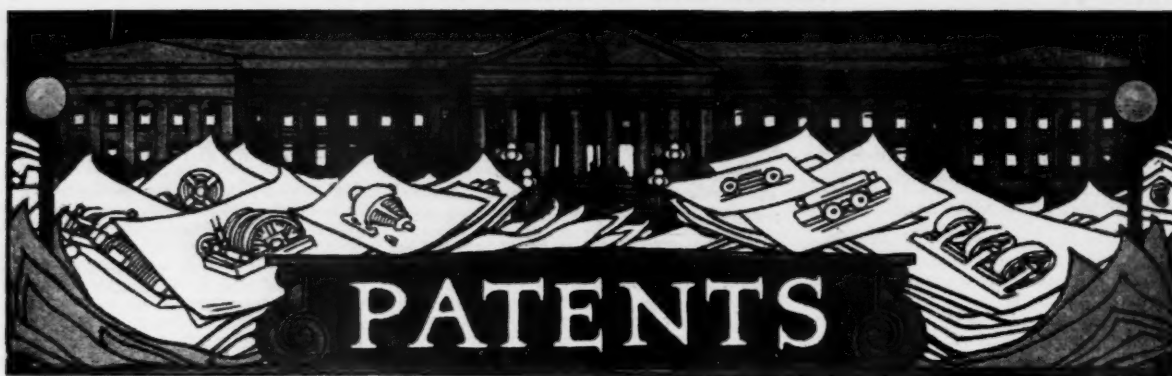
CHARLES A. MITKE, chairman of the Metal Branch of the Standardization Division of the American Mining Congress, was a caller at the offices of the organization en route to Cambridge, Massachusetts, where he will deliver a series of lectures at Boston-Technical Institute.

DETECTION OF PLATINUM

HIGH PLATINUM PRICES, stimulating prospectors to greater activity, have caused the Bureau of Mines to issue a technical paper on "The Detection and Estimation of Platinum in Ores," prepared by C. W. Davis.

Prospectors have secured a great many assays from inexperienced assayers, Mr. Davis points out, and, as might have been expected; these assays were of no value. Some of them, he thinks, were intentional attempts to deceive. Mr. Davis denies the correctness of the statement made by some companies organized for recovering platinum that certain forms of platinum cannot be removed except by special methods. He holds that the opinion of reliable chemists expressed in assaying platinum bearing metals shows that such reports are unconfirmed and should be regarded with suspicion.

The Golden station of the Bureau of Mines has carried on the bureau's platinum work. Experts there take the ground that it is not an easy task to decide upon the proper method for assaying ores containing small amounts of platinum. The paper prepared by Mr. Davis summarizes methods for the detection of the metal and gives a selective method for the commercial estimation of platinum in ores.



1,374,447—W. E. Greenawalt, Denver, Colorado, Apr. 12, 1921.

FLOTATION APPARATUS for separation of minerals from their gangue by introducing a gas into the liquid and atomizing it therein. The gas is brought into a fine state of subdivision by means of rapidly rotating perforated discs in its ascent to the liquid, and the atomized gas rising to the surface, effectively floats the mineral particles.

1,374,472—W. W. Richardson, London, England, Apr. 12, 1921.

CLASSIFYING AND CONCENTRATING MINERALS. An important feature of the invention consists in an improved method of supporting and rotating the trommel which permits the degree of inclination of the trommel to be easily and quickly altered if necessary to suit the material under treatment while a further feature of the invention consists in providing the inner periphery of the trommel with a series of riffle plates arranged in sections, each section being formed on its inner face with a series of graduated longitudinal grooves and ridges designed to offer a greater resistance to excessive wear. These ridges and grooves are intersected by a series of transverse grooves and ridges, some of which extend at right angles while others are arranged at an obtuse angle to the longitudinal grooves, in order to obtain a more effective concentration and separation of the material under treatment.

1,374,478—P. J. Stanton, Lundale, W. Va., Apr. 12, 1921.

SELF OPERATING MINE DOOR FOR LOCOMOTIVES, in which guard members are mounted on opposite sides of the doors for engagement by a locomotive to force the said doors to swing to open position and means to resiliently retain said doors in closed position.

1,374,499 and 1,374,500—W. E. Greenawalt, Denver, Colorado, Apr. 12, 1921.

FLOTATION APPARATUS.

1,374,525—J. D. Pugh, Harrisburg, Pa., Apr. 12, 1921.

COAL MINING MACHINE. The principal object of the invention is to provide a machine in which a flexible cutter in the form of an elongated loop is supported and driven from one end only, leaving the other end of the loop free and unsupported except through the cutter from the driven end thereof. The arrangement of a cutter in this form makes it possible, by tilting the cutter loop slightly, to cut a sharp V-shaped slot into a coal bank, which is very desirable in mining coal. Another object of the invention is to provide means such as an exhaust fan for removing

CONDUCTED BY JOHN BOYLE, JR.

dust from the slot cut by the machine to a point away from the machine where it will not disturb the miner. The invention also contemplates providing a pump on the machine by means of which water may be delivered to the cutter to lubricate and cool it, and to the slot in which the cutter works to keep down the dust and flow it out.

1,374,547—N. K. Bowman, Canton, Ohio, Apr. 12, 1921.

AUTOMATIC MINE DOOR formed of companion leaves coupled to swing simultaneously in opposite directions, a crank arm connected to one of said leaves, a spring connected to the crank arm to hold the door closed and means for varying the leverage of the spring.

1,374,590—N. D. Levin, Columbus, Ohio, Apr. 12, 1921. Assigned to Jeffrey Manufacturing Co.

DRILLING MACHINE, such as is commonly used in coal and other mines, supplied with supporting devices associated with a transporting truck whereby the drill may be conveniently transported from one working place to another and may be quickly and conveniently positioned for operation in any desired relation to the material to be drilled with a minimum expenditure of effort.

1,375,105—J. H. D. Petersen, Chicago, Ill., Apr. 19, 1921. Assigned to Link-Belt Company.

APPARATUS FOR HANDLING AND STORING COAL or the like, particularly at the mine head or the sizing plant, or receiving and distribution point, and for storing it or a portion of it adjacent thereto and returning it to the distribution point when desired. At a coal distribution plant there is an unequal accumulation of material due to seasonal demands. Thus, there may be in the winter a very considerable accumulation of coal not suitable for the winter trade but suitable for the summer trade and this coal must either be treated so as to be fit for the season in which it is produced or be stored. An object of this invention is to provide convenient means whereby that storage may be effected by a given apparatus which can then when desired be reversed in its operation to return such storage coal or materials to the distribution center.

1,375,211—D. Cole, Morenci, Arizona, Apr. 19, 1921. Assigned to Minerals Separation, North American Corporation.

FLOTATION APPARATUS in combination with a grinding mill, the said apparatus having provision for removing, during the froth-

ing operation, over-size material delivered thereto, and means whereby said over-size material may be returned to said mill for re-grinding.

1,375,233—W. A. Scott, Chicago, Ill., Apr. 19, 1921. Assigned to Minerals Separation, North American Corporation.

FLOTATION PROCESS comprising introducing a gas into the ore pulp, removing the gas from the mineral carrying bubbles so formed before said bubbles reach the surface of the pulp, and separating the mineral carried by the bubbles from the remainder of the ore.

1,375,638—C. J. Kienle, Columbus, Ohio, Apr. 19, 1921. Assigned to Jeffrey Manufacturing Co.

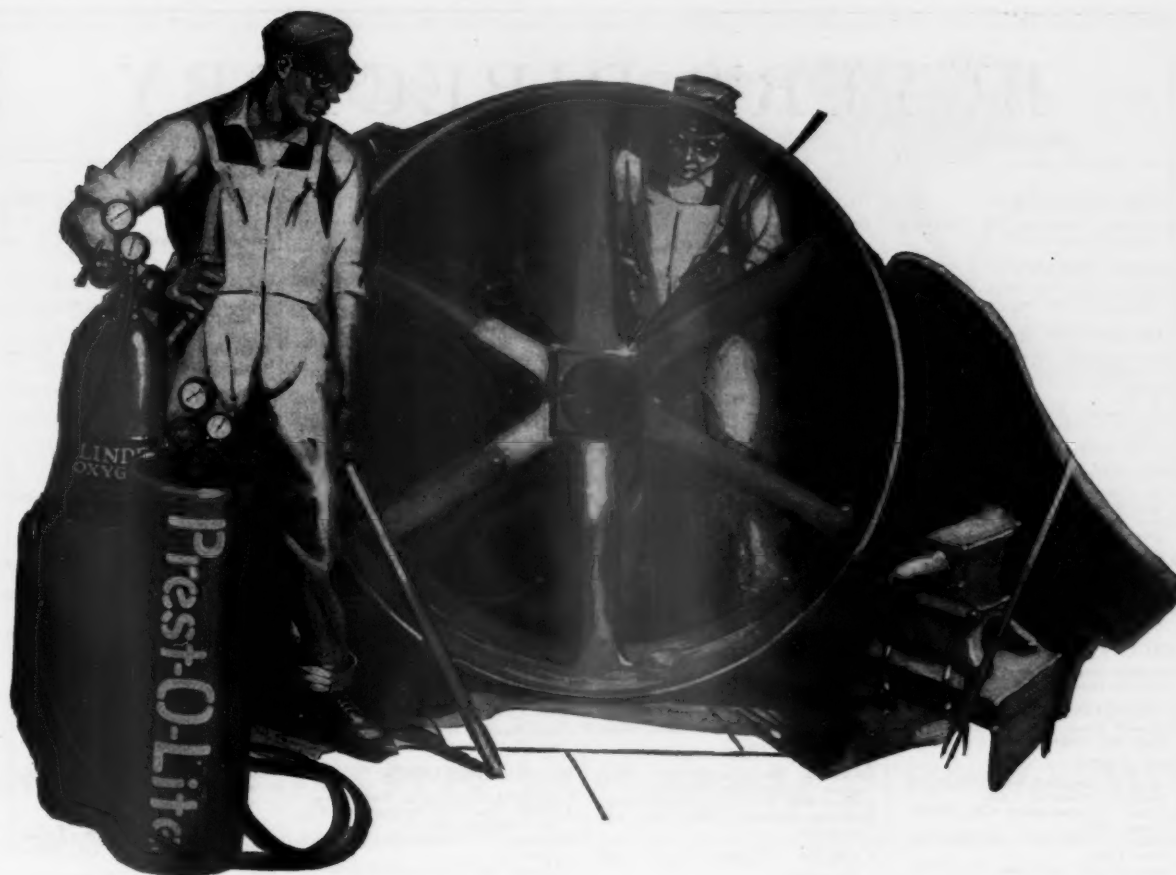
CUTTING CHAIN FOR COAL MINING MACHINES comprising means for securely holding the renewable cutter bits during the operation of the machine which will permit of expeditious and convenient replacement. The link of the block chain has a transverse aperture in which the bit is movable and a spring pressed member engages notches in the bit.

1,375,957—B. L. George, Salt Lake City, Utah, Apr. 26, 1921.

FLOTATION PROCESS which comprises adding to the ore pulp an oil having an organic acid reaction, and a quantity of zinc sulphate.

1,375,988—C. G. Walker, Bramwell, W. Va., Apr. 26, 1921.

ATTACHMENT FOR COAL CONVEYERS. In coal conveying machinery, there is always a gap of six or more inches between any two adjacent conveyers and the coal in dropping from the upper conveyor to the lower conveyor is invariably broken into small particles and is not uniformly distributed so that it is deposited onto the lower conveyor exactly as it is generally by the car-load. In this invention these objections are overcome by providing a plurality of flexible members, such as chains or the like, which are connected preferably at regular spaced intervals to the delivery end of the upper conveyor so that they depend from such end and rest on the lower conveyor in a manner to form an inclined plane which spans the gap between the conveyers and over which the coal is caused to pass when leaving the upper conveyor. Because of the flexibility of these members a flexible inclined plane is produced which gives to a limited degree, under the weight of the coal, as it impinges thereupon, so that a cushioning effect is obtained which retards the movement of the coal and thus prevents breakage thereof in passing from one conveyor to the other.



Eliminating delay in mine operation

BY keeping equipment in perfect running order with the oxy-acetylene process, progressive operators are doing away with break-downs and dollar-eating delays.

For it is now easy to use the welding and cutting blow-pipes for every sort of reclamation work in and about mines because uniformly pure.

Prest-O-Lite
DISSOLVED ACETYLENE

is supplied in readily portable, instantly available cylinders which may be taken to any job, anywhere.

Any quantity of Prest-O-Lite Dissolved Acetylene, large or small, is promptly supplied by Prest-O-Lite Service operating through forty plants and warehouses.

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BUYER'S DIRECTORY

ACID, SULPHURIC

Irving Smelting & Refining Works, Irvington, N. J.

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American Steel & Wire Co., Chicago and New York.

AIR COMPRESSORS

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
General Electric Co., Schenectady, N. Y.
Worthington Pump & Machinery Corp., 115 Broadway, New York City.

AMALGAMATORS

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Mine Equipment & Supply Co., Denver, Colo.

ARMATURES

General Electric Co., Schenectady, N. Y.
Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.

ARCHITECTS

Shourds-Stoner Co., Inc. Terre Haute, Ind.

ASBESTOS PRODUCTS

Mikesell Bros. Co., 156 North La Salle St., Chicago, Ill.

ASSAYERS

Walter E. Burlingame, 1736 Lawrence St., Denver, Colo.
Indiana Laboratories Co., Hammond, Ind.
Ledoux & Co., Inc., 99 John St., New York.
Pennsylvania Smelting Co., Pittsburgh, Pa.
W. L. Piers, 428 18th St., Denver, Colo.
Thompson Balance Co., Denver, Colo.
Union Assay Office, Inc., Box 1446, Salt Lake City, Utah.

AUTOMATIC CAR CAGERS

Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.

AUTOMATIC COAL SKIP

Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.

AUTOMATIC (Mine Doors, Truck and Electric Switches)

American Mine Door Co., Canton, Ohio.

BALANCES

Thompson Balance Co., Denver, Colo.

BALL MILLS

Mine Equipment & Supply Co., Denver, Colo.
Worthington Pump & Machinery Corp., 115 Broadway, New York City.

BATTERY-CHARGING EQUIPMENT

General Electric Co., Schenectady, N. Y.

BELTING (Conveyor, Elevator, Transmission)

Chicago Belting Co., Chicago, Ill.
Jeffrey Mfg. Co., 958 N. Fourth Avenue, Columbus, Ohio.

BELTING, SILENT CHAIN

Morse Chain Co., Ithaca, N. Y.

BELTING SUPPLIES

Chicago Belting Co., Chicago, Ill.

BINS (Coke and Coal)

Jeffrey Mfg. Co., Columbus, Ohio.

BIT SHARPENERS

Denver Rock Drill Mfg. Co., Denver, Colo.

BLASTING SUPPLIES

du Pont Powder Co., The E. I., Wilmington, Del.
Hercules Powder Co., Wilmington, Del.
National Fuse & Powder Co., Denver, Colo.

BLOWERS

General Electric Co., Schenectady, N. Y.

BOILERS

Allis-Chalmers Mfg. Co., Milwaukee, Wis. (feed pump).
Mine Equipment & Supply Co., Denver, Colo.

BRATTICE CLOTH

Mikesell Brothers Co., 156 N. La Salle Street, Chicago, Ill.

BREAKERS (Construction and Machinery)

Jeffrey Mfg. Co., Columbus, Ohio.
Vulcan Iron Works, Wilkes-Barre, Pa.
Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
Wilnot Engineering Co., Hazleton, Pa.

BRIQUETTING MACH.

General Briquetting Co., 25 Broad Street, New York City.
Jeffrey Mfg. Co., Columbus, Ohio.

BUCKETS (Elevator)

Hendrick Manufacturing Company, Carbondale, Penna.
Jeffrey Mfg. Co., Columbus, Ohio.
Stephens-Adamson Mfg. Co., Aurora, Ill.

CABLES (Connectors and Guides)

American Mine Door Co., Canton, Ohio.

CABLEWAYS

Jeffrey Mfg. Co., Columbus, Ohio.
Lidgerwood Mfg. Co., 96 Liberty St., New York City.

CAGES

Car-Dumper & Equipment Co., Chicago, Ill.
Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.
Holmes & Bros., Robert, Inc., Danville, Ill.
Lidgerwood Mfg. Co., 96 Liberty St., New York City.

CAGE (Safety Appliances)

Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.

CAR CONTROL AND CAGE EQUIPMENT

Car-Dumper & Equipment Co., Chicago, Ill.

CAR DUMPS

Car-Dumper & Equipment Co., Chicago, Ill.

CAR AND CAR WHEELS

Hockensmith Mine Car Co., Penn Station, Pa.
United Iron Works Co., Kansas City, Mo.
Watt Mining Car Wheel Co., Barnesville, Ohio.

CAR-HAULS

Car-Dumper & Equipment Co., Chicago, Ill.

CASTINGS

Jeffrey Mfg. Co., 958 N. Fourth Street, Columbus, Ohio.
The Lunkenheimer Co., Cincinnati, Ohio.
Mine Equipment & Supply Co., Denver, Colo.

CHAINS

Jeffrey Mfg. Co., Columbus, Ohio.
Morse Chain Co., Ithaca, N. Y.
Stephens-Adamson Mfg. Co., Aurora, Ill.

CHEMICALS

The Barrett Company, 90 West St., New York City.
Roescher & Haasacher Chemical Co., 100 William St., New York.

CHEMISTS

Walter E. Burlingame, 1736 Lawrence St., Denver, Colo.
Hunt, Robt., & Co., Insurance Exchange, Chicago, Ill.
Indiana Laboratories Co., Hammond, Ind.
Ledoux & Co., A. R., Inc., 99 John St., New York City.
W. L. Piers, 428 18th St., Denver, Colo.
Union Assay Office, Inc., Box 1446, Salt Lake City, Utah.

CIRCUIT BREAKERS

Automatic Reclosing Circuit Breaker Co., The, Columbus, O.
General Electric Co., Schenectady, N. Y.

CIVIL ENGINEERS

Shourds-Stoner Co., Inc., Terre Haute, Ind.

CLAMPS (Trolley)

Ohio Brass Co., Mansfield, Ohio.

CLUTCHES

Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.

COAL COMPANIES

Clinchfield Coal Corp., Dante, Va.
Lehigh Coal & Navigation Co., Philadelphia, Pa.
Stonea Coal & Coke Co., Philadelphia, Pa.
Thorne, Neale & Co., Philadelphia, Pa.
Wholesale Coal Co., Pittsburgh, Pa.

COAL CRUSHERS

American Pulverizer Co., 18th and Austin Sts., St. Louis, Mo.
Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.
Jeffrey Mfg. Co., Columbus, O.
Stephens-Adamson Mfg. Co., Aurora, Ill.

COAL CUTTERS

Goodman Mfg. Co., Chicago, Ill.
Jeffrey Mfg. Co., Columbus, Ohio.

COAL DRYING PLANTS

Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.

COAL HANDLING MACHINERY

Jeffrey Mfg. Co., Columbus, Ohio.
Lidgerwood Mfg. Co., 96 Liberty St., New York City.
Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.
Stephens-Adamson Mfg. Co., Aurora, Ill.
Watt Mining Car Wheel Co., Barnesville, Ohio.

COAL LOADING MACHINES

Myers-Whaley Company, Knoxville, Tenn.

COAL MINING MACHINERY

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Goodman Mfg. Co., Chicago, Ill.
Jeffrey Mfg. Co., Columbus, Ohio.
Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.

COAL MINE POWER PLANTS

Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.

COAL MINING PLANTS

Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.

COAL WASHING MACHINERY

Stephens-Adamson Mfg. Co., Aurora, Ill.

COAL WASHING PLANTS

Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.

COCKS (Locomotive, Cylinder and Gauge)

The Lunkenheimer Co., Cincinnati, Ohio.
Nicholson, W. H., & Co., Wilkes-Barre, Pa.
Ohio Brass Co., Mansfield, Ohio.

COILS (Choke)

General Electric Co., Schenectady, N. Y.

COKE OVENS

The Koppers Co., Pittsburgh, Penna.

COMPANY STORES (Coupons)

Allison Coupon Co., Indianapolis, Ind.

COMPRESSORS, AIR

General Electric Co., Schenectady, N. Y.

CONCENTRATORS (Magnetic)

Worthington Pump & Machinery Corp., 115 Broadway, New York City.

CONCENTRATORS (Table)

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Mine Equipment & Supply Co., Denver, Colo.
Worthington Pump & Machinery Corp., 115 Broadway, New York City.

CONCRETE REINFORCEMENT

American Steel & Wire Co., Chicago and New York.

CONDENSERS

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
Worthington Pump & Machinery Corp., 115 Broadway, New York City.

CONSULTING ENGINEERS

Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.
Shourds-Stoner Co., Inc., Terre Haute, Ind.

CONTRACTORS

H. G. Read Co., Fisher Bldg., Chicago, Ill.
Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.

CONTROLLERS

General Electric Co., Schenectady, N. Y.
Goodman Manufacturing Co., Halsted St. and 48th Place, Chicago, Ill.
Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.

CONVEYORS, BELT

Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
Stephens-Adamson Mfg. Co., Aurora, Ill.

CONVEYORS, CHAIN FLIGHT

Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
Wilnot Engineering Co., Hazleton, Pa.
Stephens-Adamson Mfg. Co., Aurora, Ill.

Why the Fort Wayne?

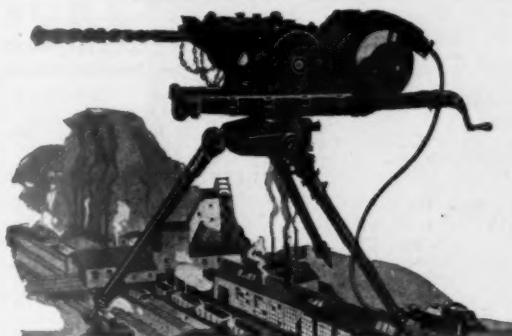
THE adaptability of the Fort Wayne Electric Rock Drill is a constant source of enthusiastic comment.

The Fort Wayne may be operated on either direct or alternating current. Thus it is ready for business wherever electric current is available. You can hook it onto the trolley within a few minutes after it is unloaded.

As one rock man said, "We can stick it up, attach a line to the trolley, another to the rail, and go right ahead." And the way those rotary hammers tear into the rock is a joy to see. No power wasted—just pure energy properly directed—1700 blows a minute—each blow 150 pounds to the square inch.

Moving entails no expense or burden—one man can do it if necessary. "For many jobs," says a mine superintendent who knows, "we don't even have to take the Wayne off the truck."

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THREE LOSSES FROM WORKING FACE TO TIPPLE

With the introduction of modern mechanical aid in mine car operation, and the consequent greater speeds and loads imposed on haulage equipment, efficient lubrication is necessary.

From 20 to 40 % of the power required by a mine is used in haulage, and in many cases a large part of this 20 to 40 % is wasted by improper lubrication of mine car wheels.

Improper lubrication causes three losses:

1. Loss of power.
2. Loss of the parts prematurely worn out.
3. Loss of labor in replacing parts.

After many painstaking experiments, under severe operating conditions, made by our lubricating specialists, we have developed the

SUPERLA GREASES

They meet, economically and efficiently the requirements of practically every make and type of wheel and axle in use on mine cars. Send for our book, "Mine Car Lubrication," which graphically describes the subject.

STANDARD OIL COMPANY

(Indiana)

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CHICAGO

Pageant of Progress Exposition at Chicago's
\$5,000,000 Municipal Pier, July 30 to August 14

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Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
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Stephens-Adamson Mfg. Co., Aurora, Ill.

CONVEYORS AND ELEVATORS

Jeffrey Mfg. Co., Columbus, Ohio.
Stephens-Adamson Mfg. Co., Aurora, Ill.

CONVEYORS, PAN OR APRON

Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
Stephens-Adamson Mfg. Co., Aurora, Ill.

CONVEYORS, PANS AND FLIGHTS

Hendrick Manufacturing Company, Carbondale, Pa.

CONVEYORS, SCREW

Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
Stephens-Adamson Mfg. Co., Aurora, Ill.

COPPER ELECTROLYTIC

United Metals Selling Co., 42 Broadway, New York City.

COPPER WIRE

Anaconda Copper Mining Co., 111 W. Washington St., Chicago, Ill.

CORE DRILLING

H. R. Ameling Prospecting Co., St. Louis, Mo.
Hoffman Bros., Punxsutawney, Pa.

COUPLINGS

Nicholson, W. H., & Co., Wilkes-Barre, Pa.

COUPONS

Allison Coupon Co., Indianapolis, Ind.

CRUSHERS

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
American Pulverizer Co., 18th and Austin Sts., St. Louis, Mo.
Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
Mine Equipment & Supply Co., Denver, Colo.
Stephens-Adamson Mfg. Co., Aurora, Ill.
United Iron Works Co., Kansas City, Mo.
Worthington Pump & Machinery Corp., 115 Broadway, New York City.

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Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.
Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
Stephens-Adamson Mfg. Co., Aurora, Ill.
United Iron Works Co., Kansas City, Mo.

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American Pulverizer Co., 18th and Austin Sts., St. Louis, Mo.
Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.

CYANIDE

American Cyanamid Co., New York, N. Y.

DERRICKS AND DERRICK FITTINGS

James H. Channon Mfg. Co., 227 W. Erie St., Chicago, Ill.

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Mine Equipment & Supply Co., Denver, Colo.
Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.
Shourds-Stoner Co., Inc., Terre Haute, Ind.

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Hoffman Bros., Punxsutawney, Pa.

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American Mine Door Co., Canton, Ohio.

DRAG LINES

Denver Rock Drill Mfg. Co., Denver, Colo.

DREDGES, GOLD AND TIN

New York Engineering Co., 2 Rector St., New York City.

DRIFTERS, DRILL

Denver Rock Drill Mfg. Co., Denver, Colo.
Ingersoll-Rand Co., New York City.

DRILLS (Blast Hole)

Denver Rock Drill Mfg. Co., Denver, Colo.
Ingersoll-Rand Co., New York City.

DRILLS, CORE

Hoffman Bros., Punxsutawney, Pa.
Ingersoll-Rand Co., New York City.

DRILLS, ELECTRIC

General Electric Co., Schenectady, N. Y.
Ingersoll-Rand Co., New York City.
Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
Union Electric Co., Pittsburgh, Pa.

DRILLS, HAMMER

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Ingersoll-Rand Co., New York City.

DRILLS (Hand Operated Coal)

Ohio Brass Co., Mansfield, Ohio.
Ingersoll-Rand Co., New York City.

DRILLS, PNEUMATIC

Denver Rock Drill Mfg. Co., Denver, Colo.
Ingersoll-Rand Co., New York City.

DRILLS, PROSPECTING

Hoffman Bros., Punxsutawney, Pa.
New York Engineering Co., 2 Rector St., New York City.

DRILLS, ROCK

Denver Rock Drill Mfg. Co., Denver, Colo.
General Electric Co., Schenectady, N. Y.
Ingersoll-Rand Co., New York City.
Union Electric Co., Pittsburgh, Pa.

DRILL STEEL SHARPENERS

Denver Rock Drill Mfg. Co., Denver, Colo.

DRIVES, SILENT CHAIN

Morse Chain Co., Ithaca, N. Y.

DRUMS (Hoisting, Haulage)

Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.

DRYERS, ORE

Allis-Chalmers Mfg. Co., Milwaukee, Wis.

DUMPERS, ROTARY

Car-Dumper & Equipment Co., Chicago, Ill.

DUMP CARS

Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.

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Hercules Powder Co., Wilmington, Del.
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Goodman Mfg. Co., Forty-eighth Place and Halstead St., Chicago, Ill.
Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.

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General Electric Co., Schenectady, N. Y.
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Goodman Mfg. Co., Forty-eighth Place and Halstead St., Chicago, Ill.
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Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
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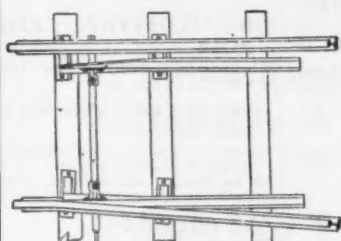
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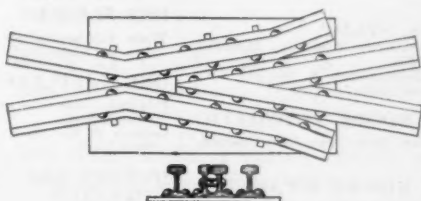
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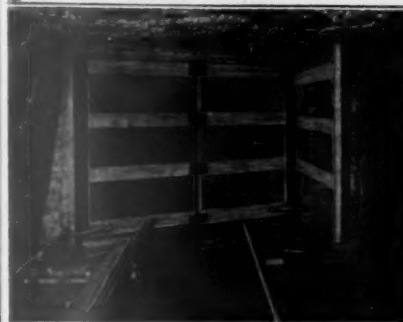
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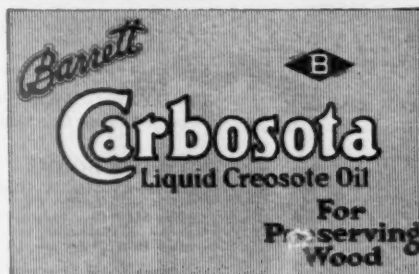
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Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.
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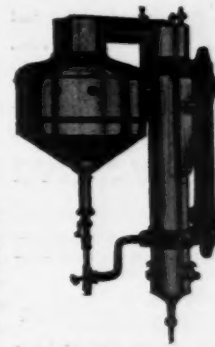
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Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.

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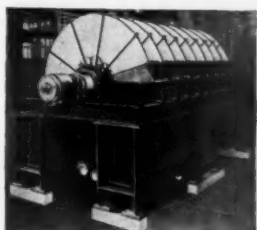
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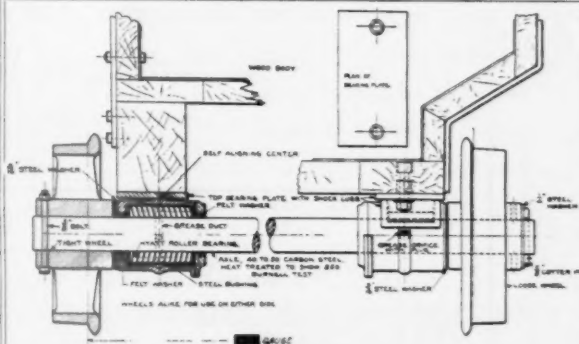
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Second—Intelligent conservation with a view to the highest utilization and the prevention of waste of mineral resources.

Third—The protection of mining investors against fraud and misrepresentation; the stimulation of investment in real mining and to demonstrate that mining is a business and not a gamble.

Fourth—Uniformity in state laws governing mining operations carried on under like conditions.

Fifth—Such federal cooperation through research and investigation as will solve those problems of production, treatment and transportation which are essential to the highest development of the Mining Industry.

Sixth—A solution of the economic problems underlying the coal industry.

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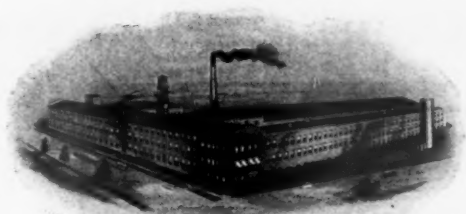
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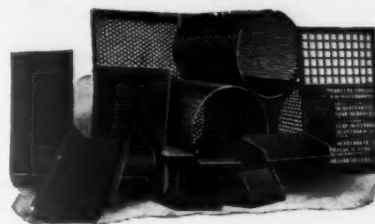
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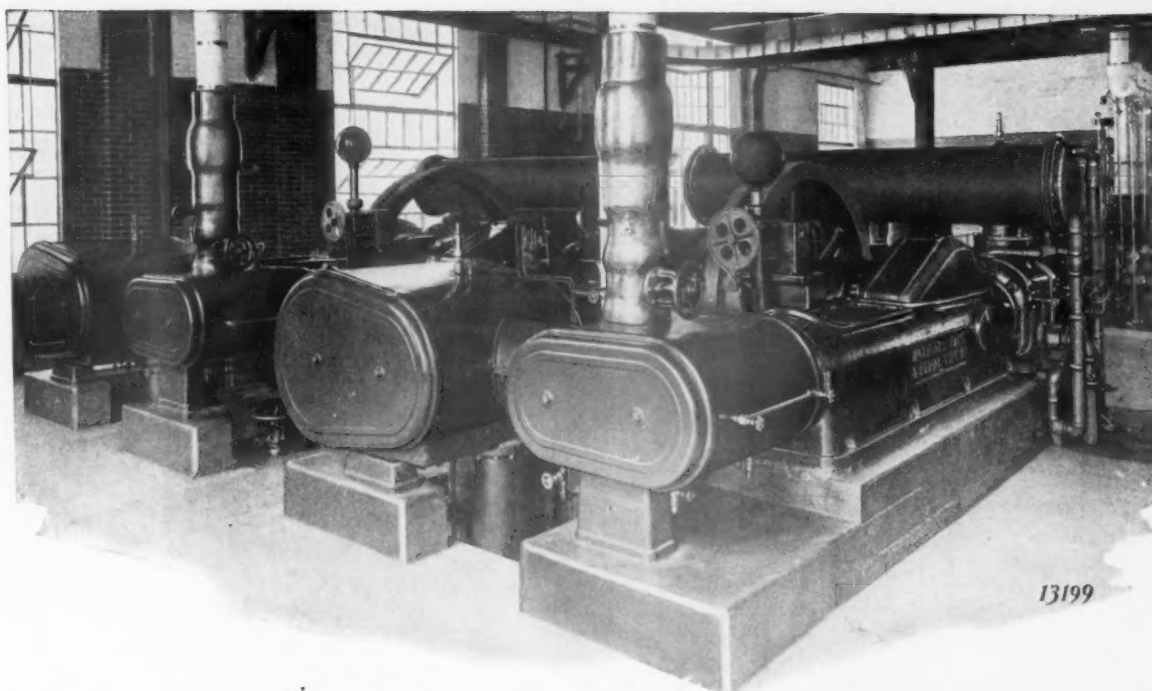
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